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Adv96091 GnRH tetr Ada88339 Murrel go Adc64758 Insulin b Adc16371 Melanoma Abb76120 L7A-GnRH- Aar07323 Luterinisi Abb69238 Micromono Aae15673 Lamprey 1 Add24656 Lamprey 1 Add24656 Lamprey 1 Add24656 Lamprey 1 Aav988385 GnRH-II t Aav11841 Example o Aav988385 GnRH-II t Aav11259 Peptide # Aab0223 GnRH-II t Aab12529 Peptide # Aam37793 Peptide # Abb43874 Peptide # Abb48651 Listeria Abg46634 Human Dra Abg46639 Gonadotro Aaw16390 Gonadotro Aaw16390 Gonadotro Aaw16390 Gonadotro	sing activity.
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The peptide has corpus luteum hormone (LH) and follicle stimulating hormone (FSH) activity. It is thus useful for treating hypogonadotropic hypogonadism. It can be prepd. by extn. of chicken hypothalamus or by chemical reaction. (Updated on 25-MAR-2003 to correct PA field.) (Updated on 24-OCT-2003 to standardise OS field)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8 Different forms of GnRH (given in AAR75152-59) have previously been isolated from vertebrate species. A precursor for an additional form of GnRH, (Ser8)-GnRH (AAR75151), has now been obtd
                                                                                                                                                                                            New deca:peptide with gonadotropin releasing activity - prepd. by extn. of chicken hypothalamus or chemical synthesis.
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(KANF ) KANEGAFUCHI KAGAKU KOGYO KK
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                                                                                                                                                                                                                                                                                           Claim 1; Col 4; 3pp; English.
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                                                                                                                                 WPI; 1985-242482/39
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                                                                  Miyamoto K,
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This sequence represents a chicken gonadotrophin-releasing hormone (GRRH), which is used in a method for producing long-term contraception or sterility by administering GRRH, beta luteinising hormone (LH) or lamprey-luteinising hormone (1-LHRH-III) or temporarily restoring fertility in a mammal in which the pituitary gonadotropes have been selectively destroyed by administration of GRRH or 1-LHRH-III. This sequence also has applications in methods for killing, or inhibiting growth of hormone or ligand-dependent tumours by administering the carivity of which is dependent on binding of a cell-surface receptor to a riepard by administering the activity of which is dependent on binding of a cell-surface receptor to a rigand by administering the ligand and lytic peptide, inhibiting reproductive capacity of an insect by administration of a lytic peptide. Rusion proteins combining such proteins and lytic peptides can be fused and any also include a carrier domain, specifically vitamin Bl2, that facilitates incestinal uptake after oral administration. These methods have applications for increasing the growth rate of mammals, for pest contrains on the treatment of ovarian, breast, prostate, endommetrial or testicular cancers, prolactionma, growth hormone.
                                                                                                                                                                                                                                                                                   GnHR, lytic peptide, rat, gonadotrophin-releasing hormone; contraception, sterility, luteinising hormone; LH, l-LHRH-III, fertility, pituitary; lamprey-luteinising hormone-releasing hormone; gonadotropes; inhibitor; tumour; ligand; fueion protein; reproductive capacity, insect; treatment; growth rate; pest control; L-hecate; cancer; adenoma; lymphocyte;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New fusion of hormone and lytic peptide for selective cell killing particularly for controlling fertility in animals, insect pests, fish etc., also for treatment of hormone-dependent cancer, viral infections and auto-immune diseases.
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Foil LD, Elzer PH;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                           AAW76390 standard; peptide; 10
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97US-00869153.
97US-0057456P.
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                                                                                                                                                                                                                                                                                                                                                                                   autoimmune disease; chicken.
                                                                                                                                                                                                 (revised)
(first entry)
                                                                                                                                                                                                                                                      Chicken II GnHR peptide.
EHWSHGWYPG 10
                               EHWSHGWYPG 10
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Modified-site
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04-JUN-1997;
03-SEP-1997;
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PA,
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Similarity
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                                  Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Selectively altering levels of follicle stimulating hormone in vertebrates - using lamprey luteinising hormone releasing-hormone and its derivatives, for increasing or reducing fertility.
                                                                                                                                                                                                                                                                                                  Lamprey III luteinising hormone releasing hormone; 1-LHRH-III; ammmalian FSH-releasing factor; serum FSH level; LH; luteinising hormone; agonist; follicle-stimulating hormone; FSH; vertebrate; fertility; antagonist; spermatogenesis inhibition; follicular development;
                                                                                                     Gaps
 thyrotropin- or gonadotropin-dependent adenomas, or any pituitary adenoma. In addition the proteins can be used to kill lymphocytes involved in a wide range of autoimmune diseases or to destropy virusinfected cells. (Updated on 17-OCT-2003 to standardise OS field)
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                                                                                                                                                                                                                                                                            Chicken luteinising hormone releasing hormone (c-LHRH-II).
                                                                              100.0%; Score 73; DB 2; Length 10; 100.0%; Pred. No. 0.00018; ive 0; Mismatches 0; Indels
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                                                                            Query Match
Best Local Similarity 100.
Matches 10; Conservative
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                                                                                                                                                                                                                                                                                                                                                ovarian development
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                                                         Sequence 10 AA;
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Modified-site
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                                                                                                                                                                                                                                                                                                                                                                                  Gallus sp.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hormone domain; gonadotropin releasing hormone; GnRH;
1-luteinising hormone releasing hormone; LiRH-III; estrogen;
testosterone; luteinising hormone; chorionic gonadotropin;
follicle stimulating hormone; melanocyte-stimulating hormone; estradiol;
dopamine; somatostatin; lytid peptide; long-term contraception;
sterilisation; human; fish; insect; hormone-dependent tumour;
hormone-related disease; autoimmune disorder; treatment.
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100.0%; Score 73; DB 2; Length 10; 100.0%; Pred. No. 0.00018;
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                                                                         Indels
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                                                                             0; Mismatches
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UNIV LOUISIANA STATE & AGRIC.
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97US-00869153.
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AAB06262 standard; peptide; 10
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          RESULT 7
AAB06262
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hormone-dependent tumours, for treating other hormone-related diseases, for selectively killing virally infected cells or for treating autoimmune
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Composition containing gonadotropin-releasing hormone II peptide, useful e.g. for treating osteoporosis and for accelerating bone repair.
                                                                                               Gaps
                                                                                                                                                                                                                                                                                                        Gonadotrophin-releasing hormone; GnRH; differentiation modulator; osteoporosis; bone metabolism; bone repair; osteogenesis imperfecta; osteomalacia; bone loss; fracture healing.
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                                                                        Length 10;
                                                                      100.0%; Score 73; DB 2; Length 10 llarity 100.0%; Pred. No. 0.00018; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                         AAY88386 standard; peptide; 10 AA.
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                                                                                                                                                                                                                                                                                 GnRH-II analogue peptide #2.
                                                                                                                                                                                                                                                         (first entry)
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Matches 10; Conservative
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Matches 10; Conserv
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                          disorders
                                                                                                                                                                                                                                  AAY88386;
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                                                                        Query Match
                                                                                                                                                                                              RESULT 6
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The present sequence is GnRH-II, a peptide with homology to gonadotrophin releasing hormone (GnRH, otherwise known as luteinising hormone releasing hormone. LiRRH). GNRH-II influences osteogenesis and modulates the proliferation of prostatic epithelial cells and so may be useful for treating human disease associated with abnormal bone and prostate growth. A biodegradable polymer is used to hold the peptide in a depot, from which the peptide is released into the systemic circulation at a controlled rate.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pharmaceutical composition for treating bone and prostrate disorders comprises a peptide microencapsulated within a biodegradable polymer
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                                                                          GRH-II; gonadotrophin releasing hormone; GRH;
luteinising hormone releasing; hormone; LHRH; osteogenesis;
prostatic epithelial cell proliferation; bone disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 10;
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                                        Gonadotrophin releasing hormone homologue GnRH-II
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100.0%; Pred. No. 0.00018;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                          /note= "Pyroglutamic acid"
                                                                                                                                                                                                                                  Location/Qualifiers
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  (first entry)
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(first entry)
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                                                                                                                            prostatic epitheli
prostate disorder
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                                                                                                                                                                                                                                    Key
Modified-site
                                                                                                                                                                                         Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                       03-DEC-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Akinsanya K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12-SEP-2003
18-JUL-2000
16-OCT-2000
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                                                                                   GnRH-II;
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Gaps ö

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                                                                                                                                                                                                                                                               The present sequence is that of chicken gonadotropin releasing hormone II (cGnRH-II). The present invention provides a means of producing biologically active peptides, such as cGnRH-II, by recombinant expression in microbial hosts. This involves the construction of a DNA cassette (see AA294528) comprising tandem repeating units of a nucleotide sequence ancoding the peptide and a linker. The DNA cassette is incorporated into a vector, and the peptide and a linker multimer is expressed in transformed microbial cells. The linkers are designed to include sites cleavable by a protease or chemical agent. Cleavage of the expressed multimer using the protease or chemical agent provides the biologically active peptide. (Updated on 12-SEP-2003 to standardise OS field)
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                              New DNA cassette comprising tandem repeating units of a nucleotide sequence encoding a biologically active peptide and a linker peptide used for producing the biologically active peptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Luteinising hormone releasing hormone (LH-RH) related peptide SEQ ID:136.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Protection; endogenous therapeutic peptide; peptidase; conjugation; blood component; modification; succinimidyl; maleimido group; amino; hydroxyl; thiol; hormone; growth factor; neurotransmitter.
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                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Score 73; DB 3; L
100.0%; Pred. No. 0.00018;
live 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAB90962 standard; peptide; 10 AA
                                                                                                                                                                                                                                              Disclosure; Page 8; 32pp; English
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99US-0153406P.
99US-0159783P.
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                                                                               99WO-KR000559
                                                                                                     98KR-00038835
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
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Best Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 EHWSHGWYPG 10
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                                                                                                                                                                         WPI; 2000-283569/24.
                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 10 AA;
                                WO200017336-A1.
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            Gallus gallus.
                                                                                                                            (LEES/) LEE S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-MAY-1999;
10-SEP-1999;
15-OCT-1999;
                                                                               17-SEP-1999;
                                                                                                     19-SEP-1998;
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                                                        30-MAR-2000
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Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAB90962;
                                                                                                                                                   Lee SJ;
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The present invention describes a modified therapeutic peptide (1) comprising a therapeutically active amino acid region (III) and a reactive group (II) (e.g. succinimidy) and maleimido groups) attached to a less therapeutically active amino acid region (IV), which covalently bonds with amino/hydroxyl/thiol groups on blood components to form a peptidase stabilised therapeutic peptide composed of 3-50 amino acids.

(I) are useful for modifying therapeutic peptides e.g. hormones, growth factors and neurotransmitters, to protect them from peptidase activity in vivo for the treatment of various disorders. Endogenous therapeutic peptides are not suitable as drug candidates as they require frequent administration due to rapid degradation by peptidases in the body.

Modifying and attaching therapeutic peptides to albumin prevents or reduces the action of peptidases to increase length of activity (half life) and specificity as bonding to large molecules decreases

infe) and specificity as bonding to large molecules decreases

contracellular uptake and interference with physiological processes.

ARB90829 to AAB9241 represent peptides which can be used in the exemplification of the present invention
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                                                                                                                                  Modifying and attaching therapeutic peptides to albumin prevents peptidase degradation, useful for increasing length of in vivo activity.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gonadotropin-releasing hormone precursor peptide related peptide #3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gonadotropin-releasing hormone precursor peptide; GnRH; octopus; gonadotropin-releasing hormone; signal processing mechanism; drug; nerve system; pesticide; cardiant.
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                                          Thibaudeau K;
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100.0%; Pred. No. 0.00018;
iive 0; Mismatches 0;
                                          Holmes DL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note= "pyroglutamic acid"
                                                                                                                                                                                                     Disclosure, Page 235, 733pp, English.
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                                          Milner PG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note= "amidated"
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(CONJ-) CONJUCHEM INC.
                                              Ezrin AM,
                                                                                        WPI; 2001-112059/12
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les 10; Conserv
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Modified-site
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                                            Bridon DP,
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                                                                                                                                                                                                                         hormone (GRRH) activity comprising the sequence: pGlu-Zaa-Zaa-His-Zaa-Sez-Zaa-Zaa-Zaa-Pro-Gly-NH2 (I), where pGlu = pyroglutamic acid and Zaa = any amino acid. Peptides with GnRH activity also have cardiant processing mechanisms in the nerve system and in developing pesticides and drugs for e.g. potentiating heart beat and in developing pesticides and drugs for e.g. potentiating heart beat and breeding and farming young octopuses. The present sequence represents a peptide which is used in the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Altering the secretion level of follicle-stimulating hormone in a vertebrate mammal comprises using peptide 1-luteinizing hormone releasing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note= "C-terminal amide; This residue is given as Xaa in
the sequence shown as SEQ ID NO: 5 in the sequence
                                                             New octopus brain-originated peptide with gonadotrophin-releasing hormone (GnRH) activity, useful in studying signal processing mechanism in nerve system and in developing pesticides and drugs, and breeding and farming
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Note= "Pyroglutamic acid; This residue is given as Xaa in the sequence shown as SEQ ID NO: 5 in the sequence listing"
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                                                                                                                                                                                                                  present invention describes a peptide with gonadotrophin-releasing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 73; DB 5; Length 10; 100.0%; Pred. No. 0.00018; Pred. No. 0.00018; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Chicken luteinising hormone releasing hormone peptide.
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                                                                                                                                                                         Disclosure; Fig 5; 45pp; Japanese.
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                    WPI; 2002-154729/20
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Best Local Similarity
Matches 10; Conser
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                                                                                                                                  young octopuses.
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                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 10 AA;
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Modified-site
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gallus sp
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DT 12-MP
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                                                 The patent discloses compositions and methods for selectively stimulating on inhibiting the release of follicle stimulating hormone (FSB) from the anterior lobe of pitulitary gland. The method involves administration of a peptide-1-luteinising hormone releasing hormone (LHRH)-III, a potent FSH-releasing factor. LHRH is also called as gonadortorphin releasing hormone (GDRH). LHRH and its agonists may be used to enhance fertility. Antagonists to LHRH-III may be used to inhibit fertility. The method is a made for altering the secretion level of FSH in a vertebrate animal e.g. a mammal such as a male and female human. The present sequence is chicken luteinising hormone (c-LHRH) peptide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 10;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       Match 100.0%; Score 73; DB 5; L Local Similarity 100.0%; Pred. No. 0.00018; es 10; Conservative 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
Disclosure; Col 3-4; 17pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (COUL ) COUNCIL SCI & IND RES.
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                                                                                                                                                                                                                                                                                                                                                                                               Sequence 10 AA;
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Modified-site
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to a method for regulating activity of a T-cell population. The method comprising providing to the T-cell population a molecule that is selected to be capable of modifyring an activity or expression level of a gonadotropin releasing hormone (GnRH)-I or a GnRH-I receptor to regulate GnRH-I or a GnRH-II mediated activity of a T-cell population. The method is useful for treating or preventing a T-cell related disease or condition characterised by abnormal T-cell activity, e.g. congenital immune deficiencies, acquired immune deficiencies, infection, psychopathology or neoplastic disease, autoimmune, allergic, hyperreactive, pathopsychological and neurological diseases and
muGnRH I and muGnRH II; and (2) inducing breeding in fishes using GnRH comprising exposing fishes to GnRH to help release gonadorropin, and inducing breeding in fishes using the gonadorropin. The present sequence represents a GnRH amino acid sequence given in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gonadotropin releasing hormone, GnRH-I; GnRH-II; T-cell related disease, congenital immune deficiency; acquired immune deficiency; hyperreactive; psychopathology; neoplastic disease, autoimmune disease, neuroprotective; pathopsychological disease, neurological disease; allograft rejection; graft-versue-host disease; allograft rejection; cytostatic; antl-HIV; allergic; gene therapy; chicken.
                                                                                                                                                                            Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                            Chicken gonadotropin releasing hormone (cGnRH-II) peptide.
                                                                                                                                       100.0%; Score 73; DB 6; Length 10; 100.0%; Pred. No. 0.00018; Pred. No. 0.0018; ive 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                      AAO31042 standard; peptide; 10 AA
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                                                                                                                                                                            10; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Koch Y;
                                                                                                                                                           Similarity
                                                                       present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -II receptor to cell population.
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                                                                                                         Sequence 10
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                                                                                                                                                                                                                                                                                                                                                                          AAO31042;
                                                                                                                                       Query Match
Best Local &
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Regulating activity of a T-cell population by providing a molecule that is capable of modifying an activity or expression level of GnRH-I or GnRH-II receptor to regulate GnRH-I or a GnRH-II mediated activity of the T-cell population.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gonadotropin releasing hormone; GnRH-I; GnRH-II; T-cell related disease; congenital immune deficiency; acquired immune deficiency; hyperreactive; psychopathology; neoplastic disease; autoimmune disease; neuroprotective; pathopsychological disease; neurological disease; allograft rejection; graft-versus-host disease; allograft rejection; cytostatic; anti-HIV; allergic; gene therapy; catfish.
conditions, graft-versus-host disease, or allograft rejections. The invention is useful in gene therapy. The present sequence is chicken gonadotropin releasing hormone (cGnRH-II) peptide
                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                 African catfish gonadotropin releasing hormone (GnRH-II) peptide.
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                                                                                                              100.0%; Score 73; DB 6; I
100.0%; Pred. No. 0.00018;
ive 0; Mismatches 0;
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Pred. No. (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Page 166; 177pp; English.
                                                                                                                                                                                                                                                                                                                        AAO31057 standard; peptide; 10 AA.
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                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                            Query Match
Best Local Similarity 100.
Matches 10; Conservative
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Best Local Similarity
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                                                                               Sequence 10 AA;
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0; Indels

Query Match
Best Local Similarity 100.0%; Pred. No. 0.00018;
Matches 10; Conservative 0; Mismatches 0;

1 EHWSHGWYPG 10

LHRH shown not to be an FSH-releasing factor.

Sequence 10 AA;

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                                                                                                                                                                                                                                                                                   luteinising hormone releasing hormone; LHRH; FSH-RF; antiinfertility; follicle stimulating hormone releasing factor; FSH-RF; antiinfertility; 1-LHRH-III; luteinising hormone; fertility; ovarian follicle; ovulation; litter size; chicken.
 Gaps
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 0; Indels
                                                                                                                                                                                                                                                        Chiken luteinising hormone releasing hormone, c-LHRH-II
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 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                              "Gly is amidated"
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                                                                                                                                                    ADD24647 standard; peptide; 10 AA
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98WO-US011512.
99US-00297989.
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 Conservative
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                                    1 EHWSHGWYPG 10
                                                                   1 EHWSHGWYPG 10
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03-JUN-1998;
11-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                            Gallus gallus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Modified-site
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                                                                                                                                                                                          Gonadotropin releasing hormone II; chicken; cGnRH-II; GnRH-II.
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                                                                                                                                                                Chicken gonadotropin releasing peptide II analogue.
                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                    AAY79311 standard; peptide; 12 AA.
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/note= "cGnRH-II"
                                                                                                                                                                                                                                                                                                      /note= "linker"
                                                                                                                                                                                                                                                                                                                                                                                      99WO-KR000559
                                                                                                                                                                                                                                                                                                                                                                                                                   98KR-00038835
                                                                                                                          (revised)
(first entry)
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Best Local Similarity 100.
Matches 10; Conservative
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  1 EHWSHGWYPG
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                                                                                                                                                                                                                                                                                                                                                                                                                                            (LEES/) LEE S.
                                                                                                                                                                                                                      Gallus gallus
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                                                                                                                          12,8EP-2003
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                                                                                                AAY79311;
                                                                                                                                                                                                                                                              Peptide
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AAY79308 standard; protein; 60 AA.

RESULT 18 AAY79308

EHWSHGWYPG 10

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The present sequence is that of a peptide comprising chicken gonadotropin releasing hormone II (cGnRH-II) flanked by 2 trypsin cleavable linker and used in the construction of a claimed bnA cassette (see AA294529) encoding the peptide was designed encoding 4 tandem repeats of cGnRH-II-linker units. The present invention provides a means of producing biologically active peptides, such as cGnRH-II, by recombinant expression in microbial hosts. This involves the construction of a DNA cassette comprising tandem repeating units of a nucleotide sequence encoding the peptide and a linker. The DNA cassette is incorporated into a vector, and the peptide-linker multimer is expressed in transformed microbial cells. The linkers are designed to expressed multimer using the protease or chemical agent. Cleavage of the biologically active peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New DNA cassette comprising tandem repeating units of a nucleotide sequence encoding a biologically active peptide and a linker peptide used for producing the biologically active peptide.
                                                                                                                                  Gonadotropin releasing hormone II; chicken; cGnRH-II; GnRH-II.
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100.0%; Pred. No. 0.00029;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                         l. .3
/note= "linker peptide"
                                                                                                                                                                                                                                                                                             14. .16
/note= "linker peptide"
                                                                                                  Linker-chicken GnRH-II-linker peptide
                                                                                                                                                                                                                      Location/Qualifiers
              AAY79310 standard; peptide; 16 AA
                                                                                                                                                                                                                                                                  4. .13
/note= "cGnRH-II"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 1; Page 9; 32pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                   99WO-KR000559.
                                                                                                                                                                                                                                                                                                                                                                                                                               98KR-00038835.
                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2000-283569/24.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N-PSDB; AAZ94529.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 16 AA;
                                                                                                                                                           Gallus gallus.
Synthetic.
Chimeric.
                                                                                                                                                                                                                                                                                                                                          WO200017336-A1
                                                                                                                                                                                                                                                                                                                                                                                                   17-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                              19-SEP-1998;
                                                                        18-JUL-2000
                                                                                                                                                                                                                                                                                                                                                                     30-MAR-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             (LEES/) LEE
                                           AAY79310;
                                                                                                                                                                                                                                 Peptide
                                                                                                                                                                                                                                                                  Peptide
                                                                                                                                                                                                                                                                                               Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Lee SJ;
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New DNA cassette comprising tandem repeating units of a nucleotide sequence encoding a biologically active peptide and a linker peptide used for producing the biologically active peptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present sequence is that of a polypeptide comprising 4 tandem repeating units of chicken gonadotropin releasing hormone II (CGnRH-II) attached via trypsin cleavable peptide linkers. It is encoded by a
                                                                Gonadotropin releasing hormone II; chicken; cGnRH-II; GnRH-II.
                                                                                                                                                             note= "trypsin cleavable site"
                                                                                                                                                                                                                                                                               note= "trypsin cleavable site"
                                                                                                                                                                                                                                                                                                                                       note= "trypsin cleavable site"
                                                                                                                                                                                                                                                                                                                                                                                               'note= "trypsin cleavable site"
                                                                                                                                                                                                                       note= "trypsin cleavable site"
                                                                                                                                                                                                                                                                                                                                                                                                         57. .60
/note= "stuffer amino acids"
                                             Chicken gonadotropin releasing hormone II.
                                                                                                                                                                                                                                                                                                           41. .43
/note= "linker peptide"
                                                                                                                                                                                                                                                                                                                                                                   54. .56
/note= "linker peptide"
                                                                                                                                          'note= "linker peptide"
                                                                                                                                                                                          15. .17
/note= "linker peptide"
                                                                                                                                                                                                                                                   28. .30
/note= "linker peptide"
                                                                                                                        ocation/Qualifiers
                                                                                                                                                                                                                             44. .53
/note= "cGnRH-II"
                                                                                                                                                                                                                                                                                        11. .40
'note= "cGnRH-II"
                                                                                                                                                                        . .14
note= "cGnRH-II"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure, Fig 9; 32pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98KR-00038835.
                           (first entry)
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N-PSDB; AAZ94528.
                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200017336-A1
                                                                                  Gallus gallus.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (LEES/) LEE S.
                                                                                                                                                     Cleavage-site
                                                                                                                                                                                                              Cleavage-site
                                                                                                                                                                                                                                                                      Cleavage-site
                                                                                                                                                                                                                                                                                                                               Cleavage-site
                                                                                                                                                                                                                                                                                                                                                                                       Cleavage-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .7-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-MAR-2000.
                           18-JUL-2000
         AAY79308;
                                                                                                       Chimeric.
                                                                                                                          Key
Peptide
                                                                                                                                                                        Peptide
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Gaps

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Length 16;

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Regulating activity of a T-cell population by providing a molecule that is capable of modifying an activity or expression level of GnRH-I or GnRH-II receptor to regulate GnRH-I or a GnRH-II mediated activity of the T-
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gonadotropin releasing hormone, GnRH-I; GnRH-II; T-cell related disease, congenital immune deficiency, acquired immune deficiency, hyperreactive; psychopathology; neoplastic disease, autoimmune disease; neuroprotective, pathopsychological disease; neurological disease, allograft rejection, graft-versus-host disease, allograft rejection, cytostatic, anti-HIV; allergic, gene therapy; pacific herring.
claimed DNA cassette (see AA294528). Incorporation of the DNA cassette into a vector and transformation of a microbial host call provides a means for producing the polygeptide, which can then be cleaved with trypsin to produce biologically active cdnRH-II. The invention relates penerally to DNA cassettes encoding multimers of a biologically active peptide and a cleavable linker, and their use in production of biologically active peptides in microbial hosts. The linker peptides are preferably cleavable by a protease (e.g. asparaginylendopeptidase, trypsin, Achromobacter protease I. Staphylococcus aureus V8 protease, tTEV protease or Factor-Xa) or chemical agent
                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pacific herring gonadotropin releasing hormone (GnRH-II) peptide.
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                                                                                                                                                                                                                                                                    Length 60;
                                                                                                                                                                                                                                                                    ch 100.0%; Score 73; DB 3; Length 60 I Similarity 100.0%; Pred. No. 0.0012; 10; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Page 166; 177pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAO31059 standard; peptide; 10 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-DEC-2002; 2002WO-IL001014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-DEC-2001; 2001IL-00147138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (revised)
(first entry)
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                                                                                                                                                                                                                                                                                                                                                 1 EHWSHGWYPG 10
                                                                                                                                                                                                                                                                                                                                                                                     14
                                                                                                                                                                                                                                                                                                                                                                                          EHWSHGWY PG
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                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Koch Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO2003051272-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              population
                                                                                                                                                                                                                             Sequence 60 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Clupea pallasi.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23-OCT-2003
06-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    26-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Levite M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAO31059;
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                                                                                                                                                                                                                                                                                                          Matches
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                                       23-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gonadotropin releasing hormone, GnRH-I; GnRH-II; T-cell related disease, congenital immune deficiency; acquired immune deficiency; hyperreactive, psychopathology; neoplastic disease, autoimmune disease; neuroprotective; pathopsychological disease; neuropical disease; allograft rejection; graft-versus-host disease; allograft rejection; immunosuppressive; cytostatic; anti-HIV; allergic; gene therapy; spiny dogfish.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Regulating activity of a T-cell population by providing a molecule that is capable of modifying an activity or expression level of GRRH-I or GRRH-II receptor to regulate GRRH-I or a GRRH-II mediated activity of the T-
                                     6
conditions, graft-versus-host disease, or allograft rejections. The invention is useful in gene therapy. The present sequence is pacific herring gonadotropin releasing hormone (GnRH-II) peptide. (Updated or OCT-2003 to standardise OS field)
                                                                                                                                                                        Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                Spiny dogfish gonadotropin releasing hormone (GnRH-II) peptide.
                                                                                                                                 Score 70; DB 6; Length 10;
Pred. No. 0.00049;
1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure, Page 164; 177pp; English.
                                                                                                                                                                                                                                                                                                                                                 AAO31050 standard; peptide; 10
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                                                                                                                                   95.9%;
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                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                        Conservative
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                                                                                                                                 Query Match
Best Local Similarity
Matches 9; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Squalus acanthias.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cell population.
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                                                                                                                                                                                                                                                                                                                                                                                                                           36-OCT-2003
                                                                                              Sequence 10
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                                                                                                                                                                                                                                                                                                                                                                                      AAO31050;
                                                                                                                                                                                                                                                                                                          RESULT 20
                                                                                                                                                                                                                                                                                                                              AA031050
  8888888
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Length 10;

9 8

Score 70;

Query Match

RESULT 21 AAR75149

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cDNA derived from mRNA isolated from treeshrew brain was amplified by PCR using primers based on (His5,Trp7,Tyr8) GnRH sequences. New primers were then generated for use in RACE, and the sequence of preprohormone cDNA was obtd. by aligning overlapping regions from consensus 5'RACE templates. (Updated on 27-AUG-2003 to correct OS field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note= "Ala at this position is replaced with Val due to single nucleotide polymorphism (SNP)"
                                                                                                                                                     Gonadotropin releasing hormone; (His5,Trp7,Tyr8)-GnRH; gonadoliberin; reproduction; transgenic animal; transgenic fish; transgenic fowl.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human, gonadotropin-releasing hormone 2; GNRH2 protein; haplotyping; genotyping; gene therapy; reproductive disorder; chromosome 20pl3; single nucleotide polymorphism; SNP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New gonadotropin releasing hormone preprohormone DNA - used to oprods. for regulation of reproductive function and diagnosis of reproductive capacity and disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            95.9%; Score 70; DB 2; Length 89; 90.0%; Pred. No. 0.0048; ive 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human gonadotropin-releasing hormone 2 (GNRH2) protein.
                                                                                                                       Ireeshrew (His5,Trp7,Tyr8)-GnRH preprohormone.
                                                                                                                                                                                                                                                                                                                                                                       (STRD ) UNIV LELAND STANFORD JUNIOR. (UYOR-) UNIV OREGON STATE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 30; Page 66-67; 85pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAE15401 standard; protein; 120 AA.
       AAR75150 standard; protein; 89 AA.
                                                                                                                                                                                                                                                                                                                                       93US-00147771.
                                                                                                                                                                                                                                                                                                         94WO-US012763
                                                                       (revised)
(first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                         Adelman JP;
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N-PSDB; AAQ90625.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                       Tupaia belangeri.
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                                                                                                                                                                                                                                       WO9512309-A1.
                                                                                                                                                                                                                                                                                                         04-NOV-1994;
                                                                                                                                                                                                                                                                                                                                       05-NOV-1993;
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                                                                       27-AUG-2003
19-DEC-1995
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                                       AAR75150;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cDNA derived from RNA isolated from ventral portions of H. burtoni brain was amplified by PCR using primers based on (His5,Trp7,Tyr8)-GnRH sequences. The PCR product was used to probe a H. burtoni ventral brain cDNA library in lamda-gt10 to isolate a full-length cDNA clone encoding the preprohormone. (Updated on 16-OCT-2003 to standardise OS field)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New gonadotropin releasing hormone preprohormone DNA - used to develop prods. for regulation of reproductive function and diagnosis of reproductive capacity and disease.
                                                                                                                                                                                                                                                                                                                     Gonadotropin releasing hormone; (Hi85,Trp7,Tyr8)-GnRH; gonadoliberin; reproduction; transgenic animal; transgenic fish; transgenic fowl.
                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
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                   0; Indels
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   Pred. No. 0.00049; Mismatches 0
                                                                                                                                                                                                                                                                                     H. burtoni (His5, Trp7, Tyr8) -GnRH preprohormone.
                                                                                                                                                                                                                                                                                                                                                                                                                       1. .23
/label= Sig_peptide
/4. .33
/abel= GnRH
34. .85
/label= GAP_peptide
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                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                   AAR75149 standard; protein; 85 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             94WO-US012763,
90.08;
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                                                                                                                                                                                                                                     (revised)
(first entry)
                     Conservative
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                                                   1 EHWSHGWYPG 10
                                                                       1 QHWSHGWYPG 10
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24 QHWSHGWYPG 33
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N-PSDB; AAQ90624.
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Best Local Similarity
 Best Local Similarity
Matches 9; Conserv
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19-DEC-1995
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11-MAY-1995
                                                                                                                                                                                                     AAR75149;
                                                                                                                                                                                                                                                                                                                                                                                                                       Peptide
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Gaps

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RESULT 22 AAR75150

Matches

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AAR97761
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                                                                                                                                                                                                                                                                                          The invention relates to genetic variants of human gonadotropin-releasing hormone 2 (GNRH2) gene. The invention also relates to compositions and methods for haplotyping and/or genotyping the GNRH2 gene in an individual. Polymudeotides of the invention are useful for studying the expression and function of GNRH2 and in expressing GNRH2 proteins for use in screening candidate drugs to treat diseases related to GNRH2 activity. They are also used in gene therapy. The methods of the invention are useful in determining whether an individual has a haplotype of haplotype pairs. The haplotyping method is useful for improving the efficiency and reliability of seases associated with GNRH2 development of drugs for treating diseases associated with GNRH2 contributed in the discovery and activity, e.g., reproductive disorders. The present sequence is human
                                                                                                                                                                                                                         New genetic variants of gonadotropin-releasing hormone 2 isogene, useful in studying expression and function of protein and for screening drugs to treat diseases e.g. reproduction disorders.
           /note= "Ala at this position is replaced with Thr due to single nucleotide polymorphism (SNP)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human, gonadotropin-releasing hormone 2; GNRH2; reproductive disorder; gynaecological; cytostatic; hormonal; target validation; gene therapy; drug screening; lead compound; chromosome p13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note= "This amino acid changes to Val due to single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note= "This amino acid changes to Thr due to single
nucleotide polymorphism"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   95.9%; Score 70; DB 5; Length 120; 90.0%; Pred. No. 0.0066; Live 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                             activity, e.g., reproductive disorders. The present seque:
GNRH2 protein. The GNRH2 gene located on chromosome 20pl3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human gonadotropin-releasing hormone 2 (GNRH2).
                                                                                                                                                                Sausker EA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        nucleotide polymorphism"
54
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAE35115 standard; protein; 120 AA.
                                                                                                                                                                Nandabalan K,
                                                                                                                                                                                                                                                                     Claim 28; Fig 3; 64pp; English
                                                                                                                                        (GENA-) GENAISSANCE PHARM INC
                                                                                           18-MAY-2001, 2001WO-US016353.
                                                                                                                  18-MAY-2000; 2000US-0205187P
                                                                                                                                                                                    WPI; 2002-055683/07.
N-PSDB; AAD25404, AAD25405.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 EHWSHGWYPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Kliem SE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 120 AA;
Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Misc-difference
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                                             WO200187910-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAE35115;
                                                                                                                                                                Duda A,
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New gonadotropin-releasing hormone 2 (GNRH2) polypeptide encoded by genetic variants having polymorphisms in the GNRH2 gene, for studying the function of, and treating disorders, such as, reproductive disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to gonadotropin-releasing hormone 2 (GNRH2) and its nucleic acid sequence. Polymorphic variants of the GNRH2 gene are useful in studying the expression and function of GNRH2, and in expressing GNRH2 proteins for use in screening candidate drugs for treating diseases associated with GNRH2 activity, such as reproductive disorders. Polymucleotides comprising a polymorphic gene variant or fragment may be used for therapeutic purposes, where a patient could benefit from expression or increased expression of a particular GNRH2 protein isoform, or an expression vector encoding the isoform may be administered to the patient. Haplotype information is useful in improving the efficiency and output of several steps in a drug discovery and development process, including target validation, identifying lead compounds, and early phase clinical trials. GNRH2 gene is used in gene therapy. The present sequence is human GNRH2 protein. GNRH2 gene is located at chromosome pl3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Seabream gonadotropin releasing hormone sbGnRH-II.
                                                                                                                                                                                                                                                                                                                                             Sausker EA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (UYWA-) UNIV MARYLAND BIOTECHNOLOGY INST.
(UYVI-) UNIV VICTORIA INNOVATION & DEV CORP.
                                                                                                                                                                                                                                                                                                                                             Duda A, Kliem SE, Nandabalan K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAR97761 standard; peptide; 9 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 27; Fig 3; 33pp; English.
                                                                                                                                                                                                                                                                          (GENA-) GENAISSANCE PHARM INC
                                                                                                                                                                                                           18-MAY-2001; 2001WO-US016353.
                                                                                                                                     01-NOV-2001; 2001WO-US050630.
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N-PSDB; AAD53499, AAD53500.
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Best Local Similarity 90.v
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24 QHWSHGWYPG 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 120 AA;
WO200294850-A2
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                                                                  28-NOV-2002.
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The peptide was synthesized with D-amino acids. It will be useful for hypogonadotropic hypogonadal men, male infertility, precocious puberty; and mammary and prostatic carcinomas. It will also be useful for development of assay for veterinary medicine. See also AAPB1573-81. (Updated on 25-MAR-2003 to correct PA field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Deca:peptide luteinising hormone releasing hormone analogues - contain natural amino acids and have high activities for releasing luteinising hormone and FSH.
                                                                                                                                                                                                                                                                                                                                                                 Luteinising hormone releasing factor; follicle stimulating hormone; fertility; precocious puberty; mammary carcinoma; prostatic carcinoma.
                                      Gaps
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 Score 67; DB 1; Length 10;
Pred. No. 0.0014;
1; Mismatches 0; Indels
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                                                                                                                                                                                                     AAP81582 standard; protein; 10 AA.
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91.8%; {
milarity 90.0%; I
Conservative 1;
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(first entry)
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Matches 9; Conservative
                                                                           1 EHWSHGWYPG 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 EHWSHGWYPG 10
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                                                                                                            EHWSYGWYPG 10
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 Query Match
Best Local Similarity
Matches 9; Conserv
                                                                                                                                                                                                                                                                                                                                  LHRH analogue no.
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10-OCT-1990
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                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic.
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                                                                                                                                                                RESULT 27
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                                                                                                                                                                                     AAP81582
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                                                                                        Novel seabream gonadotropin-releasing hormone and its analogues - useful for controlling gonadal development and spawning in fish.
                                                                                                                                                                              A seabream pitutary extract was subjected to HPLC. A fraction showing gonadotropin releasing hormone (GnRH) activity was subjected to pyroglutamyl aminopeptidase digestion and the peptide obtd. (AAR97761) was sequenced. The peptide, designated sbGnRH-II, was shown to be identical to the previously described chicken GnRH-II. sbGnRH is useful for controlling reproduction in fish
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Deca:peptide luteinising hormone releasing hormone analogues - contain natural amino acids and have high activities for releasing luteinising hormone and FSH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Luteinising hormone releasing factor, follicle stimulating hormone, fertility, precocious puberty, mammary carcinoma, prostatic carcinoma.
                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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                       Gothilf Y;
                                                                                                                                                                                                                                                                                                                                              93.2%; Score 68; DB 2; Length 9; 100.0%; Pred. No. 1.40+06; ive 0; Mismatches 0; Indels
                       Powell J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kubota M;
                   Zohar Y, Sherwood NM, Rivier JEF,
                                                                                                                                                 Disclosure; Page 25; 63pp; English
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(first entry)
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                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 100.
Matches 9; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                        2 HWSHGWYPG 10
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                                                        WPI; 1996-286922/29
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                                                                                                                                                                                                                                                                                                             Sequence 9 AA;
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10-OCT-1990
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Gaps

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10-OCT-1990 (first entry)
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                        LHRH analogue no.
                                                                                                                                                                                                                                                                                                                                                                                                            correct PI field.
                                                                                                                                                                                                                                                                                                   hormone and FSH.
                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 10 AA;
                                                                                                                                                        26-AUG-1985;
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10-OCT-1990
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                                                                                                                                26-JAN-1988
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                                                                                                                                                                                                                               Folkers K,
                                                                                  Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to a new salmon gonadotropin-releasing hormone (GRRH) decageptide analogue capable of binding to human chorionic, placental or ovarian GRH receptors and active in the presence of a post-proline peptidase or an endopeptidase. The analogue comprises a D-amino acid substitution at position of and an ethylamide or aza-Gly-amide cubstitution at position 10. The analogue is useful as a luteolytic, menses-inducing agents and/or post-coital contraceptive. It is useful to production, and has a direct effect on steroidogenesis at the ovary. It is useful in preparing a pharmaceuticals, as a menses-regulating agent, contraceptive or as an abortifacient. It is also useful for regulating to Groutzaceptive or as an abortifacient. It is also useful for regulating contraceptive or as an abortifacient. It is also useful for regulating agent. Contraceptive or as an abortifacient in the physiologic contraceptive of the decapeptide analogue to interact with the physiologic regulation of hGG, progesterone and prostaglandin during luteal phase of the cycle and early pregnancy, may be used to specifically interrupt luteal function and analogue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ó
                                                                                                                                                                                                                                                                                                                                                                        Novel salmon gonadotropin-releasing hormone decapeptide analog that binds to human chorionic, placental or ovarian gonadotropin-releasing hormone receptors, useful as luteolytic and/or post-coital contraceptive.
                                                                                                                                                       /note= "alpha-aza-Gly-NH2 or ethylamide or other Gly-
amide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
Gonadotropin-releasing hormone; GnRH; chorionic; placental; ovarian; proline peptidase; endopeptidase; chorionic gonadotropin; hCG; steroidogenesis; luteolytic; contraceptive; chicken.
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-ham 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 10;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       90.4%; Score 66; DB 90.0%; Pred. No. 0.00; ive 0; Mismatches
                                                                                             'note= "pyroglutamic acid"
                                                                                                         /label= D-Arg
/note= "encoded by G
10
                                                                       Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                       Example 9; Page 44; 45pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAP81574 standard; protein; 10
                                                                                                                                                                                                                                          13-AUG-2002; 2002WO-US025619
                                                                                                                                                                                                                                                                 17-AUG-2001; 2001US-00932149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25-MAR-2003 (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                      WPI; 2003-300607/29.
                                                                                                                                                                                                                                                                                        (SILE/) SILER-KHODR
                                                                                                                                                                                                                                                                                                                                                 N-PSDB; ACC47385
                                                                                                        Misc-difference
                                                                                                                                                                                            WO2003016331-A2
                                                                                                                                                                                                                                                                                                                Siler-Khodr TM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 10 AA;
                                                                        Key
Modified-site
                                                                                                                                          Modified-site
                                               Gallus gallus
                                                                                                                                                                                                                  27-FEB-2003
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puberty;
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Luteinising hormone releasing factor; follicle stimulating hormone; fertility; precocious puberty; mammary carcinoma; prostatic carcinoma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Luteinising hormone releasing factor; follicle stimulating hormone; fertility; precocious puberty; mammary carcinoma; prostatic carcinoma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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Pred. No. 0.0027;
); Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                         Kubota M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ź
                                                                                                                                                                                                                                                                                                                                                                                                      Tang PFL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 2; Page 10; 10pp; English.
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                                                                                                                                                                                                                                            85US-00771546.
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(first entry)
                                                                                                                                                                                                                                                                                                                                                   (TEXA ) UNIV TEXAS SYSTEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 90...
Best Society 90...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (TEXA ) UNIV TEXAS SYSTEM
                                                                                                                                                                                                                                                                                                                                                                                                         Bowers CY,
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Gaps

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This peptide is a chimeric analogue of a naturally occuring vertebrate gonadotropin releasing hormone (GRH). It stimulates the release of GRHs from the pituitary of vertebrates. This activates gametogenesis and steroidogenesis in the gonads. It can be used to regulate eg the CNS, adrenals, gonads and mammary tissues. See also AAR11840-48 and AAR11850, (Updated on 25-MAR-2003 to correct PF field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New gonadotropin releasing hormone analogues - stimulate reproductive processes.
                          ; DB 2; Leust. ... 0.0027; 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 89.0%; Score 65; DB 2; Length 10; 90.0%; Pred. No. 0.0027; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                         GRH; gonadotropins; gametogenesis; steroidogenesis.
                                  Score 65; DB 2
Pred. No. 0.002
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                        /note= "pyro glutamyl"
                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                  Example of peptide analogue of GRH.
                                                                                                                                                                 AAR11849 standard; protein; 10 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 3; Page 20; 21pp; English.
                                                                                                                                                                                                                                                                                                                                       label= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                      89ZA-00008317.
                                                                                                                                                                                                                                                                                                                                                                                                                              90GB-00237488
                                  89.0%;
90.0%;
                                                                                                                                                                                                               (revised)
(first entry)
                                                           9; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10
                                                                                1 EHWSHGWYPG 10
                                                                                                      EHWSHKWYPG 10
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П
                                             Similarity
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           Sequence 10 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (MILL/) MILLAR
                                                                                                                                                                                                                                                                                                                        Key
Modified-site
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                                                                                                                                                                                                             25-MAR-2003
12-JUL-1991
                                                                                                                                                                                                                                                                                                                                                                                GB2237571-A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Millar RP;
                                                                                                                                                                                                                                                                                                Synthetic
                                Query Match
Best Local S
                                                                                                                                                                                       AAR11849;
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                                                Best Loc
Matches
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Matches
                                                                                                                                            35
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ID AAR7
XX
                                                                                                                                         RESULT 32
AAR11849
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                                                                                                                The peptide was synthesized with D-amino acids. It will be useful for hypogonadotropic hypogonadal men, male infertility, precocious puberty; and mammary and prostatic carcinomas. It will also be useful for development of assay for veterinary medicine. See also AAP81574-82. (Updated on 25-WAR-2003 to correct PA field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This peptide is a chimeric analogue of a naturally occuring vertebrate gonadotropin releasing hormone (GRH). It stimulates the release of GRHs from the pituitary of vertebrates. This activates gametogenesis and steroidogenesis in the gonads. It can be used to regulate eg the CNS, adrenals, gonads and mammary tissues. See also AAR11840-49. (Updated on 25-MAR-2003 to correct PF field.)
                                     veca:peptide luteinising hormone releasing hormone analogues - contain
natural amino acids and have high activities for releasing luteinising
hormone and FSH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gonadotropin releasing hormone analogues - stimulate reproductive
                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                            Score 65; DB 1; Length Lv, Pred. No. 0.0027;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                3RH; gonadotropins; gametogenesis; steroidogenesis.
 Kubota M;
                                                                                                                                                                                                                                                 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note= "pyro glutamyl"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                         Example of peptide analogue of GRH.
                                                                                                                                                                                                                                                                                                                                                        AAR11850 standard; protein; 10 AA.
Tang PFL,
                                                                                            Claim 1; Page 10; 10pp; English.
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/label= OTHER
                                                                                                                                                                                                                      89.0%;
90.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                      (revised)
(first entry)
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Best Local Similarity 90.0
Best Local 9; Conservative
                                                                                                                                                                                                                                                                                              10
                                                                                                                                                                                                                                                                        1 EHWSHGWYPG 10
Bowers CY,
                                                                                                                                                                                                                                                                                             EHWSHGWOPG
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                      WPI; 1988-049675/07
                                                                                                                                                                                                   Sequence 10 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (MILL/) MILLAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Key
Modified-site
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12-JUL-1991
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        processes
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                                                                                                                                                                                                                                                                                                                                  RESULT 31
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Gaps

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GnRH

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appoposis and tumour regression. GarH analogues are also useful for producing antibodies that specifically bind to non-mammalian GaRH peptide sequences or to tumour tissues or any other non-pituitary GaRH peptide or protein, for the treatment of proliferative disorders. This sequence represents a chicken II GaRH analogue peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chicken, gonadotropin releasing hormone, postcoital contraceptive agent, GnRH; pregnancy; ovarian cyst, endometriosis, polycystic ovarian disease, leimyomas; luteolytic agent, fertility regulation, menses-inducing agent, abpormal uterine bleeding, abnormal pregnancy; trophoblastic disease; ectopic pregnancy; molar pregnancy; human chorionic gonadotropin, hGG, abortion; gynaecological; cytostatic; abortifacient; contraceptive.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gonadotropin-releasing hormone (GARH) analogue for regulating tumour GAR activity, where the analogue is capable of binding to extra-pituitary GARH receptors expressed on tumour tissues. The analogue has a greater binding affinity than mammalian GARH and is resistant to degradation by post-proline peptidases, particularly those found around tumour tissues, and endopeptidases found circulating in the blood GARH analogues are useful for regulating tumour activity by acting as superagonists at tumour tissue, leading to tissue receptor down regulation. The peptides act to reduce tumour cell proliferation and metastasis and can induce
                                                                                                                                                                                                                                                                                                                                                                                                                           hormone analog capable of binding greater affinity and resistant to useful in tumor growth regulation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           invention relates to a composition comprising a non-mammalian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note= "Pyroglutamic acid; Encoded by CAG"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         89.0%; Score 65; DB 4; Length 10; 90.0%; Pred. No. 0.0027; ive 0; Mismatches 1; Indels
  /note= "This residue is amidated aza-Gly"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alternative version #2 of chicken GnRH peptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                Non-mammalian gonadotropin-releasing
hormone receptors in tumor cell with
degradation by tumor tissue enzymes,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAE28138 standard; peptide; 10 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 11; Page 39; 49pp; English
                                                                                                                                                                                           31-MAR-2000; 2000US-00540685.
                                                                                                                                              26-SEP-2000; 2000WO-US026575
                                                                                                                                                                                                                                                                                                             Siler-Khodr TM, Khodr GS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
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                                                                                                                                                                                                                                         SILER-KHODR T M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 EHWSHGWYPG 10
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                                                                                                                                                                                                                                                                                                                                                           WPI; 2001-662948/76.
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                                                                                                                                                                                                                                                                KHODR G S.
                                                                                                                                                                                                                                                                                                                                                                                  N-PSDB; AAS14772
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 10 AA;
                                                WO200174377-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gallus gallus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27-DEC-2002
                                                                                                  11-0CT-2001
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                                                                                                                                                                                                                                         (KHOD/)
                                                                                                                                                                                                                                                                (KHOD/)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8 Different forms of GnRH (given in AAR75152-59) have previously been isolated from vertebrate species. A precursor for an additional form of GnRH, (Ser8)-GnRH (AAR75151), has now been obtd. (Updated on 27-AUG-2003 to correct OS field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New gonadotropin releasing hormone preprohormone DNA - used to develop prods. for regulation of reproductive function and diagnosis of reproductive capacity and disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GnRH; gonadotropin-releasing hormone; extra-pituitary GnRH receptor; antitumour; cytostatic; mammal; post-proline peptidase; endopeptidase; blood; cell proliferation; metastasis; apoptosis; tumour regression; proliferative disorder; chicken; chicken II GnRH analogue; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                  Gonadotropin releasing hormone; GnRH; gonadoliberin; reproduction; transgenic animal; transgenic fish; transgenic fowl.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 65; DB 2; Length 10;
Pred. No. 0.0027;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Encoded by CAG"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (STRD ) UNIV LELAND STANFORD JUNIOR. (UYOR-) UNIV OREGON STATE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Fig la; 85pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAU08771 standard; peptide; 10 AA.
                                                                                                                    Dogfish GnRH (5His, 7Trp, 8Leu).
                                                                                                                                                                                                                                                                                                                                                                                    94WO-US012763
                                                                                                                                                                                                                                                                                                                                                                                                                                93US-00147771
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                                                  (revised)
(first entry)
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Best Local Similarity 90..
Acceptance 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Fernald RD, Adelman JP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   note=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Misc-difference 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 10 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gallus gallus
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                                                                                                                                                                  Gonadotropin
                                                                                                                                                                                                                                                                                                                                                                               04-NOV-1994;
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                                                                                                                                                                                                                                                                                    WO9512309-A1
                                                27-AUG-2003
19-DEC-1995
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AAR75157;
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                                                                                                                                                                                                                                      Squalea
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ANU08771
ID AAU08771
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fish; fish breeding; gonadotropin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               analogues of gonadotropin releasing hormone (GRRH) capable of binding to ovarian, tubal, endometrial, uterine, prostate or testicular GRRH receptors and active in the presence of a post-proline peptidase or an endopeptidase. Sequences of the invention are useful for requiating and treating a condition of the ovaries, fallopian tubes, uterus, prostate, endometrium, testicles or tissues of pregnancy in a patient or animal. They are useful in various treatment methods as a contraceptive or post-coital contraceptive agent, for maintaining pregnancy when used in very low doses and administered in pulsatile fashion.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               invention are useful in the preparations for the treatment of ovarian cysts, endometriosis and leimyomas. They are useful as luteolytic agents, no fertility regulation, as menses inducing agents and the management of ovarian cyst, polycystic ovarian disease, abnormal uterine bleeding, in vitro fertilisation protocols, abnormal pregnancies, ectopic pregnancies, molar pregnancies and trophoblastic disease. Sequences of the invention regulate human chorionic gonadctropin (RGZ) production and thus the progesterone production in pregnancy and is useful in the management of threatened abortion or the induction of abortions. The present sequence is an alternative version of chicken GnHR decapeptide. Note: This sequence is stated to be the same as that shown as SEQ ID NO: 2 in page 19 (claim 1 and claim 4) of the specification. However the sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Novel non-mammalian gonadotropin releasing hormone analogs useful to regulate reproductive functions and disorders, as menses regulators, contraceptives or abortifacients.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present invention relates to novel non-mammalian peptide hormone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
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Pred. No. 0.0027;
); Mismatches 1; Indels
                                 /note= "D-form residue; Encoded by GGC"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADA88935 standard; peptide; 10 AA.
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90.0%;
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Best Local Similarity
19; Conserve
                                                                                                                                                                                                                                                                                                                                                                                 (SILE/) SILER-KHODR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2002-681323/73.
Misc-difference 6
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                                                                                                   US2002065226-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       Siler-Khodr T;
                                                                                                                                                                                                                                                                                                               15-OCT-1999;
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The present invention describes gonadotropin releasing hormones (GRRH) mugnRH II (ADA88923) and muGnRH II (ADA88924), isolated from Indian Murrel fish. They can be used for inducing breeding in fishes both in combination and alone by activating production of gonadotropin. The GRRH serial and muGnRH II have the amino acid sequences Gln-His-Trp-Ser-Alla-Trp-Arg-Leu-Pro-Gly (I) and Gln-His-Trp-Ser-Trp-Gly-Ile-Leu-Pro-Gly (II), respectively. Also described: (I) isolating and sequencing muGnRH I and muGnRH II; and (2) inducing breeding in fishes using GnRH comprising exposing fishes to GnRH to help release gonadotropin, and inducing breeding in fishes using the peacest sequence represents a GnRH amino acid sequence given in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gonadotropin releasing hormone; GnRH-I; GnRH-II; T-cell related disease; congenital immune deficiency; acquired immune deficiency; hyperreactive; psychopathology; neoplastic disease; autoimmune disease, neuroprotective pathopsychological disease; neurological disease; allograft rejection; graft-versus-host disease; relograft rejection; cytostatic; anti-HIV; allergic; gene therapy; dogfish.
                                                                                                                                                                                                                                                                                                                       for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                    gonadotropin releasing hormones muGnRH I and muGnRH II useful
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                                                                                                                                                                                                                                                            Pasha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 65; DB 6; Length 10;
Pred. No. 0.0027;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Dogfish gonadotropin releasing hormone (dfGnRH) peptide.
                                                                                                                                                                                                                                                            Bhattacharaya S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note= "Pyroglutamic acid"
10
                                         /note= "pyroglutamic acid"
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           Location/Qualifiers
                                                                                                                                                                                                                                                          Dasgupta S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAO31043 standard; peptide; 10 AA.
                                                                        /note= "amidated'
                                                                                                                                                                                                                                                                                                                                                                   Disclosure, Fig 1; 23pp; English
                                                                                                                                                                                                                           (COUL.) COUNCIL SCI & IND RES
                                                                                                                                                                 .0-JAN-2003; 2003WO-IN000015.
                                                                                                                                                                                               2002US-0353041P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   89.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              90.06;
                                                                                                                                                                                                                                                                                                                                       induced breeding in fishes
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9; Conservative
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                                                                                                                                                                                                                                                            Chatterjee A, Ray P,
                                                                                                                                                                                                                                                                                      WPI; 2003-663464/62.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 9; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           present invention
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                                                                                                    WO2003064460-A2.
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              Key
Modified-site
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Modified-site
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                                                        Modified-site
                                                                                                                                                                                               30-JAN-2002;
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                                                                                                                                   07-AUG-2003
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The peptide was synthesized with D-amino acids. It will be useful for hypogonadotropic hypogonadal men, male infertility; precocious puberty; and mammary and prostatic carcinomas. It will also be useful for development of assay for veterinary medicine. See also AAP81573-82. (Updated on 25-MAR-2003 to correct PA field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Composition containing gonadotropin-releasing hormone II peptide, usefule.
                                                                                           Deca:peptide luteinising hormone releasing hormone analogues - contain natural amino acids and have high activities for releasing luteinising hormone and FSH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This sequence represents a gonadotrophin-releasing hormone (GnRH) II-related peptide. GnRH is released by the hypothalamus and acts on the pituitary to stimulate the release of lutenizing hormone and follicle
                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gonadotrophin-releasing hormone, GnRH; differentiation modulator; osteoporosis; bone metabolism; bone repair; osteogenesis imperfecta; osteomalacia; bone loss; fracture healing.
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                                                                                                                                                                                                                                                                                                                                                                                Length 10;
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Pred. No. 0.0038;
0; Mismatches 1; Indels
                  Kubota M;
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                  Tang PFL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAY88387 standard; peptide; 11 AA.
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                                                                                                                                                                       Claim 4; Page 10; 10pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                  87.7%;
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                  Bowers CY,
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                                                         WPI; 1988-049675/07
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                                                                                                                                                                                                                                                                                                                                              Sequence 10 AA;
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Modified-site
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                    Folkers K,
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Best Local S:
Matches
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AAY88387
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ô
                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to a method for regulating activity of a T-cell population. The method comprising providing to the T-cell population a molecule that is selected to be capable of modifying an activity or expression level of a gonadotropin releasing hormone (GnRH)-I or a GnRH-I or a GnRH-II mediated activity of a T-cell population. The method is useful for treating or preventing a T-cell related disease or condition characterised by abnormal T-cell activity, of a GnRH-I or the method is useful for treating or preventing a T-cell related disease or condition neoplastic disease, autoimmune, allergic, hyperreactive, pathopsychological and neurological diseases and conditions, graftversus-host disease, or allograft rejections. The invention is useful in gene therapy. The present sequence is dogfish gonadotropin releasing hormone (dfGnRH) peptide
                                                                                                                                                                                                                                                                                                     Regulating activity of a T-cell population by providing a molecule that is capable of modifying an activity or expression level of GnRH-I or GnRH-II receptor to regulate GnRH-I or a GnRH-II mediated activity of the T-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Luteinising hormone releasing factor; follicle stimulating hormone;
fertility; precocious puberty; mammary carcinoma; prostatic carcinoma.
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/note= "C-terminal amide"
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                                                                                                                17-DEC-2002; 2002WO-IL001014
                                                                                                                                                    17-DEC-2001; 2001IL-00147138
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(first entry)
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Best Local Similarity 90...
9; Conservative
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                                                                                                                                                                                                                                                                    WPI; 2003-523498/49.
                                                                                                                                                                                                                                Koch Y;
                                                                                                                                                                                                                                                                                                                                                                population.
                                    WO2003051272-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 10 AA;
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10-OCT-1990
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                                                                           26-JUN-2003
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RESULT 38 AAP81576

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stimulating hormone. GRRH is capable of modulating the differentiation of bone precursor cells, and inducing the expansion of osteoblast populations. The peptide can be used in compositions for treating osteoporosis (and other diseases of bone metabolism) and for the acceleration of bone repair. The compositions have osteogenic activity. The compositions are used to treat or prevent osteoporosis, other disorders of bone metabolism (e.g. osteogenesis imperfects, osteomalacia or bone loss resulting from prolonged periods of immobility), and to accelerate bone growth and repair (e.g. for healing fractures)
                                                                                                                                                                        Gaps
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                                                                                                                                                                         1,
                                                                                                                                               Score 62.5; DB 3; Length 11; Pred. No. 0.007; 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                           GDRH-II; gonadotrophin releasing hormone; GDRH; luteinising hormone releasing; hormone; LHRH; osteogenesis; prostatic epithelial cell proliferation; bone disorder; prostate disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             acid"
                                                                                                                                                                                                                                                                                                                                                        GnRH-II resin-bound protected peptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          'note= "Pyroglutamic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                  AAB06264 standard; peptide; 11 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Ser(Bzl)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "His (Bom) "
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Trp (CHO) "
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "Tyr(Bzl)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 note= "His(Bom)"
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Best Local Similarity
Matches 10; Conserv
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                                                                                                                        Sequence 11 AA;
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AAB06264
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                                                                     The present sequence is GnRH-II, a peptide with homology to gonadotrophin releasing hormone (GnRH, otherwise known as luteinising hormone releasing hormone, LHRH). GnRH-II influences osteogeneeis and modulates the proliferation of prostatic epithelial cells and so may be useful for treating human disease associated with abnormal bone and prostate growth. A biodegradable polymer is used to hold the peptide in a depot, from which the peptide is released into the systemic circulation at a controlled rate. The peptide was first prepared in the present resinbound protected form and was then cleaved and deprotected to produce a form suitable for use as a therapeutic agent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Regulating activity of a T-cell population by providing a molecule that is capable of modifying an activity or expression level of GnRH-I or GnRH-II receptor to regulate GnRH-I or a GnRH-II mediated activity of the T-cell population.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to a method for regulating activity of a T-cell population. The method comprising providing to the T-cell population a molecule that is selected to be capable of modifying an activity or expression level of a gonadotropin releasing hormone (GnRH)-I or a GnRH-II receptor to regulate GnRH-I or a GnRH-II mediated activity of a T-cell population. The method is useful for treating or preventing a T-cell related disease or condition characterised by abnormal T-cell activity,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gonadotropin releasing hormone, GnRH-I, GnRH-II, T-cell related disease, congenital immune deficiency; acquired immune deficiency; hyperreactive; psychopathology; neoplastic disease, autoimmune disease, neuroprotective; pathopsychological disease; neurogical disease; allograft rejection; graft-versus-host disease; allograft rejection; immunosuppressive; cytostatic; anti-HIV; allergic; gene therapy; spiny dogfish.
comprises a peptide microencapsulated within a biodegradable polymer.
                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Spiny dogfish gonadotropin releasing hormone (GnRH-I) peptide #1.
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                                                                                                                                                                                                                                                                                                                                  Score 62.5; DB 3; Length 11;
Pred. No. 0.007;
0; Mismatches 0; Indels
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                                           Disclosure; Page 6; 13pp; English.
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90.9%;
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Best Local Similarity
Matches 10; Conserv
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                                                                                                                                                                                                                                                                                                 Sequence 11 AA;
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Length 10; Indels

Score 62; DB 6; Len Pred. No. 0.0075;

84.9%;

Conservative 10 10

Best Local Similarity Matches 8; Conserv

Query Match

1 EHWSHGWYPG OHWSHGWLPG Ą

ABB06171 standard; peptide; 12

RESULT 43

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ABB0617

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Regulating activity of a T-cell population by providing a molecule that is capable of modifying an activity or expression level of GnRH-I or GnRH-II receptor to regulate GnRH-I or a GnRH-II mediated activity of the T-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gonadotropin releasing hormone, GnRH-I; GnRH-II; T-cell related disease, congenital immune deficiency; acquired immune deficiency; hyperreactive; psychopathology; neoplastic disease, autoimmune disease, neuroprotective, pathopsychological disease; neurological disease; neurological disease; allograft rejection; graft-versus-host disease; allograft rejection; cytostatic; anti-HIV; allergic; gene therapy; spiny dogfish.
e.g. congenital immune deficiencies, acquired immune deficiencies, infection, psychopathology or neoplastic disease, autoimmune, allergic, hyperreactive, pathopsychological and neurological diseases and conditions, graft-versus-host disease, or allograft rejections. The invention is useful in gene therapy. The present sequence is spiny dogfish gonadotropin releasing hormone (GnRH-I) peptide
                                                                                                                                                                                                                 Gaps
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0
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                                                                                                                                                                      Score 62; DB 6;
Pred. No. 0.0075;
1; Mismatches 1
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                                                                                                                                                                                                                                                                                                                                                                                        AAO31055 standard; peptide; 10 AA
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                                                                                                                                                                                           Local Similarity 80.0
les 8; Conservative
                                                                                                                                                                                                                                              1 EHWSHGWYPG 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New octopus brain-originated peptide with gonadotrophin-releasing hormone (GnRH) activity, useful in studying signal processing mechanism in nerve system and in developing pesticides and drugs, and breeding and farming
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                       Gonadotropin-releasing hormone precursor peptide, GnRH, octopus, gonadotropin-releasing hormone, signal processing mechanism, drug, nerve system, pesticide, cardiant.
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                                                                                Gonadotropin-releasing hormone precursor peptide
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88.9%; Pred. No. 0.013;
iive 1; Mismatches
                                                                                                                                                                                                                       acid"
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                                                                                                                                                                                              Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                        Kuroda
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                                                     (first entry)
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8; Conserv
                                                                                                                                                                   Octopus vulgaris.
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                                                     13-MAY-2002
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                          ABB06171;
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Best Local S
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Sequence 10 AA;

by GGA"

Synthetic.

AAP81579;

RESULT 44

AAP81579

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The present invention relates to novel non-mammalian peptide hormone analogues of gonadotropin releasing hormone (GRRH) capable of binding to ovarian, tubal, endometrial, uterine, prosente or testicular GRRH receptors and active in the presence of a post-proline peptidase or an endopeptidase. Sequences of the invention are useful for regulating and treatment testiciles or tissues of pregnancy in a patient or animal. They are useful in various treatment methods as a contraceptive or post-coital contraceptive agent, for maintaining pregnancy when used in very coital contraceptive agent, for maintaining pregnancy when used in very coital contraceptive agent, for maintaining pregnancy when used in very invention are useful in the preparations for the treatment of ovarian cysts, endometriosis and leimyomas. They are useful as luteolytic agents, invention are useful in the preparations for the treatment of ovarian cyst, polycystic ovarian disease, abnormal uterine bleeding, in vitro fertilisation protocols, abnormal pregnancies, ectopic pregnancies, or molar pregnancies and trophoblastic disease. Sequences of the invention regulate human chorionic gonadortopin (hCG) production and thus the progesterone production in pregnancy and is useful in the management of threatened abortion or the induction of abortions and bortion or the induction of abortions and abortion or the same as that shown as SEQ ID NO: 2 in page 15 in feet.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Novel non-mammalian gonadotropin releasing hormone analogs useful to regulate reproductive functions and disorders, as menses regulators, contraceptives or abortifacients.
                                                                                                                                                             /note= "Aza-Gly; C-terminal amide; Encoded
                                                       /note= "Pyroglutamic acid; Encoded by CAG"
                                                                                               /label= Arg
/note= "D-form residue; Encoded by GGC"
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Pred. No. 0.015;
); Mismatches
               Location/Qualifiers
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88.9%; Pred
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                                                                                                                                                                                                                                                                                        28-AUG-2001; 2001US-00941094.
                                                                                                                                                                                                                                                                                                                              15-OCT-1999; 99US-00419161.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (revised)
                                                                                                                                                                                                                                                                                                                                                                      (SILE/) SILER-KHODR T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              σ
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Best Local Similarity
Best Local 8; Conserve
                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI, 2002-681323/73.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 EHWSHGWYP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              N-PSDB; AAD44973
                                                                           Misc-difference
                                   Misc-difference
                                                                                                                                                                                                      US2002065226-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 10 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                  Siler-Khodr T;
                                                                                                                                         Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25-MAR-2003
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쉱
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The peptide was synthesized with D-amino acids. It will be useful for hypogonadotropic hypogonadal men, male infertility; precocious puberty; and mammary and prostatic carcinomas. It will also be useful for development of assay for veterinary medicine. See also AAP81573-82. (Updated on 25-MAR-2003 to correct PA field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Deca:peptide luteinising hormone releasing hormone analogues - contain natural amino acids and have high activities for releasing luteinising hormone and FSH.
                                                                                                                                                                                                                                                Luteinising hormone releasing factor; follicle stimulating hormone, fertility; precocious puberty; mammary carcinoma; prostatic carcinoma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 60; DB 1; Length 10; Pred. No. 0.015;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alternative version #1 of chicken GnRH peptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tang PFL, Kubota M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAE28137 standard; peptide; 10 AA.
                                                            AAP81579 standard; protein; 10 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 7; Page 10; 10pp; English.
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                                                                                                                                       (revised)
(first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Folkers K, Bowers CY,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 EHWSHGLYPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
9; Conserva
                                                                                                                                                                                                        LHRH analogue no. 7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1988-049675/07.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 10 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gallus gallus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-AUG-1985;
                                                                                                                                                                                                                                                                                                                                                                                                                                      26-AUG-1985;
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                                                                                                                                         25-MAR-2003
10-OCT-1990
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Gaps

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Length 10; 1; Indels

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AAE28137

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The analogues of the invention are useful for controlling ovulation in fish, birds and mammals. They have higher activity than their natural counterparts. (Updated on 10-MAR-2003 to add missing OS field.) (Updated on 25-MAR-2003 to correct P field.)
                                                                                                                                                                                                                                                           New gonadoliberin analogues - useful for ovulation control in fish birds and mammals.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GRH; gonadotropins; gametogenesis; steroidogenesis
                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 59; DB 1;
Pred. No. 0.021;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1; Mismatches
                                                                                                                                                                                    (VALT-) KOEZPONTI VALTO ES HITELBANK RT. (INNO-) INNOVACIOS ALAP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note= "pyro glutamyl"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example of peptide analogue of GRH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAR11843 standard; protein; 10 AA.
            /label= pyroGlu
                                        /label= Gly-NH2
                                                                                                                                                                                                                                                                                                                 Claim 2; Page 25; 29pp; French.
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/label= OTHER
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                                                                                                                            84BE-00901307
                                                                                                                                                        83HU-00004458
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Best Local Similarity 80.0%;
Matches 8; Conservative
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(first entry)
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                                                                                                                                                                                                                                               WPI; 1985-159468/27
                                                                                                                                                                                                                 (KERT-) KERTZBUTE.
Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 10 AA;
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Modified-site
                          Modified-site
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                                                                                                                            .9-DEC-1984;
                                                                                                                                                          23-DEC-1983;
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12-JUL-1991
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                                                                                                 19-JUN-1985
                                                                     BE901307-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The peptide of the invention has a potent effect on the reproduction processes of fish. Spawning of teleostei fish can be promoted by administration of effective amounts of the peptide. The peptide of the invention is effective at a level of less than about 10 micrograms per long grams of body weight, when administered to fish. It is considered to be effective in fish and in other vertebrates, including mammals and amphibians. (Updated on 25-WAR-2003 to correct PA field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gonadotropin releasing hormone deca:peptide - for stimulating pituitary gland of fish to cause spawning.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                             Rivier JEF;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                             Sequence of fish gonadotropin hormone releasing hormone (GnRH)
                                                         Luteinising hormone; follicle stimulating hormone; spawning.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hormone; reproduction; fertility; contraception; ovulation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      80.8%; Score 59; DB 1; Length 10;
80.0%; Pred. No. 0.021;
ive 1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                               Spiess J,
                                                                                                                                                                                                                                                                                                                                                                            Sherwood NM, Eiden LE, Brownstein MJ,
                                                                                                                                                                                                                                                                                                                    SALK ) SALK INST BIOLOGICAL STUDIES. (SHER/) SHERWOOD NM. (SALK ) SALK INST BIOLOGICAL STUDIES.
                                                                                                               Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAP50510 standard; protein; 10 AA.
                                                                                                                                         label= pyroGlu
                                                                                                                                                                        /label= Gly-NH2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 1; Col 7; 4pp; English.
                                                                                                                                                                                                                                                              82US-00437949.
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 (first entry)
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Best Local Similarity 80..
8, Conservative
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EHWSYGWLPG 10
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                                                                                                                                Misc-difference
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                                                                                                                                                           Modified-site
                                                                                                                                                                                                                                                              01-NOV-1982;
                                                                                                                                                                                                                                                                                        01-NOV-1982;
   31-JAN-1992
                                                                                                                                                                                                     US4443368-A,
                                                                                                                                                                                                                                 17-APR-1984.
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10-MAR-2003
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                                                                                    Salmo salar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Vertebrata.
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Gaps

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Length 10; 1; Indels 0.021;

Pred. No.

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                                                     This peptide is a chimeric analogue of a naturally occuring vertebrate gonadotropin releasing hormone (GRH). It stimulates the release of GRHs from the pituitary of vertebrates. This activates gametogenesis and steroidgenesis in the gonads. It can be used to regulate eg the CNS, adrenals, gonads and mammary tissues. See also AAR11840-42 and AAR11844-50. (Updated on 25-WAR-2003 to correct PF field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New gonadotropin releasing hormone analogues - stimulate reproductive
        gonadotropin releasing hormone analogues - stimulate reproductive
                                                                                                                                                                      Gaps
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80.0%; Pred. No. 0.021;
iive 1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                      GRH; gonadotropins; gametogenesis; steroidogenesis.
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/label= OTHER
/note= "pyro glutamyl"
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                                                                                                                                                                                                                                                              AAR11844 standard; protein; 10 AA.
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                                     Claim 2, Page 19, 21pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        89ZA-00008317.
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(first entry)
                                                                                                                                                            Similarity 80.08; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 10 AA;
                                                                                                                               Sequence 10 AA;
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Modified-site
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12-JUL-1991
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   processes.
                                                                                                                                                                                                                                                                                                                                                                          Synthetic
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                                                                                                                                                 Query Match
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DB 2;

80.8%; Score 59;

Query Match

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New gonadotropin releasing hormone preprohormone DNA - used to develop prods. for regulation of reproductive function and diagnosis of reproductive capacity and disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                  Gaps
                                                                                                                                                                                                                                                                                                                                                                             Gonadotropin releasing hormone; GnRH; gonadoliberin; reproduction; transgenic animal; transgenic fish; transgenic fowl;
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80.0%; Pred. No. 0.021;
iive 1; Mismatches 1; Indels
                    Indels
                    1,
                      Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Fig 1a; 85pp; English.
                                                                                                                                                                                                              AAR75154 standard; peptide; 10 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            94WO-US012763
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Best Local Similarity 80.0
Matches 8; Conservative
Best Local Similarity 80.0
Matches 8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Adelman JP;
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                                                             1 EHWSHGWYPG 10
                                                                                                   1 EHWSYKWYPG 10
                                                                                                                                                                                                                                                                                                                                         Salmon GnRH (7Trp, 8Leu)
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Job time : 59.5 secs
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-NOV-1993;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    Salmo sp.
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us-09-857-115-6.rpr

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gene coxII intron
protein-tyrosine k
ATP-deaka-type gonado
probable tail fibe
growth factor-indu
nerve growth factor
regulatory protein
hypothetical prote
probable tail fibe
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A; Residues: 25-34 <B0G2>
A; Experimental source: brain
C; Superfamily: gonadoliberin
C; Superfamily: gonadoliberin
C; Reywords: amidated carboxyl end; hormone; hypothalamus; pyroglutamic acid
F;1-24/Domain: signal sequence #status predicted <SIG>
F;1-24/Domain: signal sequence #status predicted carboxyles caperimental <MATI>
F;25-34/Product: gonadoliberin II #status experimental <MATI>
F;38/Modified site: pyrrolidone carboxylic acid (Gln) (in mature form) #status experimen
F;25/Modified site: amidated carboxyl end (Gly) (amide in mature form from following gly.
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R;Bogerd, J.; Li, K.W.; Janssen-Dommerholt, C.; Goos, H.
Biochem: Blopby9. Res. Commun. 187, 127-134, 199.2
A;Title: Two gonadctropin-releasing hormones from African catfish (Clarias gariepinus).
A;Reference number: JC1242; MUID:92392313; PMID:1520292
                                                                                                                                                                                                                                                                                                                                   C,Accession: A53453
R;White, S.A.; Bond, C.T.; Francis, R.C.; Kasten, T.L.; Fernald, R.D.; Adelman, J.P.
Proc. Natl. Acad. Sci. U.S.A. 91, 1423-1427, 1994
A;Title: A second gene for gonadotropin-releasing hormone: cDNA and expression pattern A;Reference number: A53453; WUID:94151343; PMID:8108425
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C,Species: Haplochromis burtoni
C,Date: 25-Aug-1995 #sequence_revision 25-Aug-1995 #text_change 16-Jul-1999
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C;Superfamily: gonadoliberin
C;Keywords: brain; hormone
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                                                           1 EHWSHGWYPG 10
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22 QHWSHGWYPG 31
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nes 9; Conserv
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A; Residues: 1-86 < BOG1>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Molecule type: mRNA
A; Residues: 1-85 < WHI>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Accession: S45600
        Matches
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NiAlternate names: gonadorropin-releasing hormone
Species: Squalus acanthias (spiny dogfish)
(Species: Gyalus acanthias (spiny dogfish)
Cjate: 06-Jan-1995 #sequence (revision 06-Jan-1995 #text_change 20-Jan-2003
Cjates: Squalus acanthias (spiny dogfish)
Cjatession: B46030
Ricovejoy, D.A.; Fischer, W.H.; Ngamvongchon, S.; Craig, A.G.; Nahorniak, C.S.; Peter, R
Proc. Natl. Acad. Sci. U.S.A. 89, 6373-6377, 1992
Arithle: Distinct sequence of gonadorropin-releasing hormone (GnRH) in dogfish brain pro
A;Reference number: A46030; MUD:92335300; PMID:1631133
A;Accession: B46030
A;Accession: B46030
A;Residues: 1-10 clov.
A;Residues: 1-10 clov.
C;Superfamily: gonadoliberin
C;Superfamily: gonadoliberin
C;Keywords: hormone; pyroglutemic acid
F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
Rilovejoy, D.A.; Sherwood, N.M.; Fischer, W.H.; Jackson, B.C.; Rivier, J.E.; Lee, T. Gen. Comp. Endocrinol. 82, 152-161, 1991
AyTitle: Primary structure of gonadotropin-releasing hormone from the brain of a holocep AyTitle: Primary structure of gonadotropin-releasing hormone from the brain of a holocep AyAccession: A61126, MUID:91340667; PMID:1678723
AyAccession: A61126
AyMolecule type: protein
AyResidues: 1-10 clova
AyExperimental source: brain
Cysuperfamily: gonadoilberin
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C,Comment: This protein with the roles as the physiologic regulator of gonadotropin rele
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Chicken-II-type gonadotropin-releasing hormone precursor - Japanese medaka
Chicken-II-type gonadotropin-releasing hormone precursor - Japanese medaka
Chicken-II-type gonadotropin-releasing letter  
Chacession: JC7394

Chacession: JC7394

Change S. A. Amano, M.; Yoshiura, Y.; Suetake, H.; Aida, K.
Biochem. Biophys. Res. Commun. 276, 298-303, 2000

A;Title: A novel form of gonadotropin-releasing hormone in the medaka, Oryzias latipes.
A;Reference number: JC7393
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Pred. No. 0.00015;
1; Mismatches 0; Indels
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llarity 90.0%; Pred. No. 0.00015;
Conservative 1; Mismatches 0;
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Pred. No. 0.0012;
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Matches 9; Conservative
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A;Gene: cgnrh-II
Superfamily: gonadoliberin
C;Keywords: brain
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es 9; Conser
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Best Local Similarity
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A; Residues: 1-80 <OKU>
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Best Local Si
Matches 9;
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C;Species: Oncorhynchus masou (cherry salmon)
C;Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 20-Jan-2003
C;Accession: IS1180
E;Suzuki, M.; Hyodo, S.; Kobayashi, M.; Aida, K.; Urano, A.
T;Suzuki, M.; Hyodo, S.; Kobayashi, M.; Aida, K.; Urano, A.
J. Mol. Endocrinol. 9, 73-82, 1992
A;Title: Characterization and localization of mRNA encoding the salmon-type gonadotrophi
A;Reference number: I51180; MUID:92384893; PMID:1515027
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gonadorropin releasing hormone - Atlantic salmon Cispecies: Salmo salar (Atlantic salmon) Cispate: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 21-Jul-2000 Cispate: 15:356 Isi356 Isi3
                                                                                                                                                                                                                                                                               G;Species: Oncorhynchus tschawytscha (chinook salmon)
C;Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 09-Aug-1997
C;Accession: IS1092
R;Klungland, H: Lorens, J.B.; Andersen, O.; Kisen, G.O.; Alestrom, P.
R;Klungland, H: Lorens, J.B.; Andersen, O.; Kisen, G.O.; Alestrom, P.
A;Title: The Atlantic salmon prepro-gonadotropin releasing hormone gene and mRNA.
A;Reference number: IS1040; MUID:92267241; PMID:1587389
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0.12;
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                                                                                                                                                                                                                                                   gonadotropin releasing hormone - chinook salmon (fragment)
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A, Status: preliminary; translated from GB/EMBL/DDBJ
A, Molecule type: DNA
A, Residues: 1-74 eXLU>
A, Cross-references: EMBL:X79711; NID:g499322; PID:g499323
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A;Status; preliminary; translated from GB/EWBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-82 - SUZA
A;Cross-references: GB:S44614; NID:g254824; PID:g254825
C;Superfamily: gonadoliberin
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Pred. No. 0.12
2; Mismatches
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Best Local Similarity 70.0
Matches 7; Conservative
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Matches 7; Conservative
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EHWSHGWYPG 10
                                   OHWSYGWLPG 10
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A;Introns: 38/3; 65/3
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A49187
C; Soladotropin-releasing hormone III - sea lamprey
C; Soladotropin-releasing hormone III - sea lamprey
C; Soladotropin-releasing hormone III - sea lamprey)
C; Date: 19-Dec-1993 #sequence_revision 18-Nov-1994 #text_change 03-Mar-1995
C; Accession: A49187
R; Sower, S.A.; Chiang, Y.C.; Lovas, S.; Conlon, J.M.
Bridderinology 132, 1125-1131, 1993
A; Pritle: Primary structure and biological activity of a third gonadotropin-releasing hor A; Reference number: A49187; MUID: 93178316; PMID: 8440174
A; Accession: A9187
A; Accession: A9187
A; Accession: Dreliminary
A; Accession: A9187
A; Residues: 1-10 < SOW>
A; Residues: 1-10 < SOW>
A; Residues: acquence extracted from NCBI backbone (NCBIP:126381)
                                                                                               Andoliberin I - spiny dogfish

Nalternate names: gonadotropin-releasing hormone
().Species: Squalus acanthias (spiny dogfish)
C).Bate: 06-Jan-1995 acanthias (spiny dogfish)
C).Bate: 06-Jan-1995 acanthias (spiny dogfish)
C).Accession: A46030
C).Accession: A46030
C).Accession: A46030
C).Accession: A6030
C).Accession: A6030
C).A. 199. A.Title: Distinct sequence of gonadotropin-releasing hormone (GnRH) in dogfish brain properties Distinct Sequence of gonadotropin-releasing hormone (GnRH) in dogfish brain properties: preliminary
A;Reference number: A46030
A;Refatus: preliminary
A;Status: preliminary
A;Status: protein
A;Residues: protein
A;Residues: location: pyrroglutamic acid
C;Reywords: hormone; pyrroglutamic acid
F;L/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
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gonadoliberin - chum salmon
gonadoliberin - chum salmon
C;Species: Oncorhynchus keta (chum salmon)
C;Species: Oncorhynchus keta (chum salmon)
C;Date: 10-Aug-1990 #sequence_revision 10-Aug-1990 #text_change 18-Jun-1993
C;Accession: A21114
Broc. Natl. Acad. Sci. U.S.A. 80, 2794-2798, 1983
A;Ritle: Characterization of a teleost gonadotropin-releasing hormone.
A;Reference number: A21114; MUID:83195140; PMID:6341999
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Pred. No. 0.0022;
1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1; Mismatches
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A;Molecule type: protein
A;Residues: 1-10 <SHE>
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Best Local Similarity
Matches 7; Conserv
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Best Local Similarity
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Gradoliberin precursor - red sea bream

gonadoliberin precursor - red sea bream)

y.Alternate names: prepro-sGnRH

C,Species: Chrysophrys major (red sea bream)

R,Okuzawa, K.; Araki, K.; Tanaka, H.; Kagawa, H.; Hirose, K.

G, Arcession: Endocrinol. 96, 224-227, 1994

A,Title: Molecular cloning of a cDNA encoding the prepro-salmon gonadotropin-releasing hc

A,Reference number: IS1095; MUID:995154651; PMID:7851723

A;Accession: IS1095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C. Accession: A23735
R. Bond, C.T.; Francis, R.C.; Fernald, R.D.; Adelman, J.P.
Mol. Endocatinol. S. 931-937, 1991
A. Tatle: Characterization of complementary DNA encoding the precursor for gonadotropin-relation and an A23735; MuID:92049375; PMID:1944299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C. Comment: This protein with the roles as the physiologic regulator of gonadotropin rele
                                                                                                                                                              C;Species: Oryzias latipes (Japanese medaka)
C;Species: Oryzias latipes (Japanese medaka)
C;Date: 17-Nov-2000 #sequence_revision 17-Nov-2000 #text_change 17-Nov-2000
C;Accession: JG7395
R;Okubo, K.; Amano, M.; Yoshiura, Y.; Suetake, H.; Aida, K.
B;Okubo, K.; Amano, M.; Yoshiura, Y.; Suetake, H.; Aida, K.
A;Okubo, K.; Amano, M.; Yoshiura, Y.; Suetake, H.; Aida, K.
A;Title: A novel form of gonadotropin-releasing hormone in the medaka, Oryzias latipes.
A;Reference number: JC7393
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C,Species: Haplochromis burtoni
C,Date: 30-Dec-1991 #sequence_revision 30-Dec-1991 #text_change 18-Jun-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
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                                                                                                                                     salmon-type gonadotropin-releasing hormone precursor - Japanese medaka
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A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Reaidues: 1-90 <OKU>
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24 QHWSYGWLPG 33
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Matches 7; Conserv
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Matches 7; Conser
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A; Residues: 1-90 <OKU>
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C,Keywords: brain
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151331
gondatoropin releasing hormone - brook trout
C;Species: Salvelinus fontinalis (brook trout)
C;Species: Salvelinus fontinalis (brook trout)
C;Date: 04-Sep-1997 #sequence_revision 04-Sep-1997 #text_change 05-Nov-1999
C;Date: 04-Sep-1997 #sequence_revision 04-Sep-1997 #text_change 05-Nov-1999
C;Date: 04-Sep-1997 #sequence_revision 06-Sep-1997 #text_change 05-Nov-1999
C;Date: 04-Sep-1997 #sequence_revision 06-Sep-1997 #text_change 05-Nov-1999
R;Klungland, H: Lorens, U.B.; Andersen, O.; Kisen, G.O.; Alestrom, P.
A;Relecence number: 151040; MUID:92267241; PMID:1587389
A;Reference number: 151040; MUID:92267241; PMID:1587389
A;Residues: 1-82 *KLU>
A;Residues: 1-82 *KLU>
A;Residues: 1-82 *KLU>
A;Cross-references: EMBL:X79712; NID:9499336; PIDN:CAA56151.1; PID:9499337
C;Genetics:
A;Gene: GRRH
A;Introns: 46/3; 73/3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 13

151365

151366

gonadotropin-releasing hormone - brown trout

C.Species: Salmo trutta (brown trout)

C.Species: Salmo trutta (brown trout)

C.Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 21-Jul-2000

C.Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 21-Jul-2000

C.Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 21-Jul-2000

Mol. Cell. Endocrinol. 84, 167-174, 1992

Mol. Cell. Endocrinol. 84, 167-174, 1992

A.Atcession: ISI365

A.Accession: ISI365
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                  A;Cross-references: EMBL:X79709; NID:g499341; PID:g499342
A;Accession: I51355
A;Accession: I51355
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-62 <KL2>
A;Cross-references: EMBL:X74957; NID:g402786; PIDN:CAA52912.1; PID:g402787
C;Genetics:
A;Gene: GRAH
A;Introns: 46/3; 73/3
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A,Genetics:
A,Introns: 46/3; 73/3
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Pred. No. 0.13;
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A;Molecule type: DNA
A;Residues: 1-82 <KLU>
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Best Local Similarity 70.v
70.v
7, Conservative
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Best Local Similarity 70.0
Matches 7; Conservative
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24 QHWSYGWLPG 33
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24 QHWSYGWLPG 33
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Best Local Similarity
   A;Residues: 1-82 <KLU>
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probable tail fiber protein [imported] - Escherichia coli (strain O157:H7, substrain RIM C; Species: Escherichia coli () Date: 18-Jul-2001 #sequence_revision 18-Jul-2001 #text_change 17-May-2002 () Accession: E90968 () Accession: E90968 () Aktion, K.; Ohnishi, M.; Kurokawa, K.; Ishii, K.; Yokoyama, K.; Han, C.G. R; Hayashi, T.; Makino, K.; Ohnishi, M.; Kurokawa, K.; Ishii, K.; Yokoyama, H. DNA Res: 8, 11-22, 2001 () Aritle: Complete genome sequence of enterohemorrhagic Escherichia coli O157:H7 and genc A; Reference number: A99629; MUID:21156231; PMID:11258796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Cross-references: GB:AE000924; GB:AE000666; NID:g2622777; PIDN:AABB6125.1; PID:g262276
A;Experimental source: strain Delta H
C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 conserved hypothetical protein MTH1653 - Methanobacterium thermoautotrophicum (strain De
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     R;Smith, D.R.; Doucette-Stamm, D.A.; Deloughery, C.; Lee, H.; Dubois, J.; Aldredge, T.; Olu, D.; Spadafora, R.; Vicaire, R.; Wang, Y.; Wierzbowski, J.; Gibson, R.; Jiwani, N. ki, S.; Church, G.M.; Daniels, C.J.; Mao, J.; Rice, P.; Noelling, J.; Reeve, J.N. A; Li, S.; Church, G.M.; Tils, 1997
A;Title: Complete genome sequence of Methanobacterium thermoautotrophicum Delta H: funct A;Reference number: A69000; MUID:98037514; PMID:9371463
A;Cross-references: GB:AE000896; GB:AE000666; NID:g2622424; PIDN:AAB85808.1; PID:g262243
A;Experimental source: strain Delta H
C;Genetics:
A;Gene: MIH1330
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A;Experimental source: strain O157:H7, substrain RIMD 0509952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Status: preliminary; nucleic acid sequence not shown; translation not shown
A;Molecule type: DNA
A;Residues: 1-321 <MTH>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C;Species: Methanobacterium thermoautotrophicum
C;Date: ,05-Dec-1997 #sequence_revision 05-Dec-1997 #text_change 22-Oct-1999
C;Accession: A69088
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Pred. No. 28;
1; Mismatches 0; Indels
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                                                                                                                                                            Score 47.5; DB
Pred. No. 8.8;
0; Mismatches
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Pred. No. 8.8;
0; Mismatches
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87.5%;
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Best Local Similarity 85.7%;
Matches 6; Conservative
                                                                                                                                                                  Query Match 65.1%;
Best Local Similarity 87.5%;
Matches 7; Conservative
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Best Local Similarity 87.5
Matches 7; Conservative
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A;Molecule type: DNA
A;Residues: 1-437 <HAY>
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A;Start codon: GTG
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A;Accession: H69043 A;Accession: H69043 A;Accession: Lain ary; nucleic acid sequence not shown; translation not shown A;Residues: 1-319 cMTH>
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                                              DB 2; Length 90;
                                                                                                      1; Indels
                                              Score 56; DB 2;
Pred. No. 0.14;
2; Mismatches
                                              76.7%;
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Best Local Similarity 70...
7, Conservative
                                              Query Match
Best Local Similarity 70.0
Matches 7; Conservative
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A;Status: preliminary
A;Molecule type: DNA
A;Molecule type: DNA
A;Molecule type: DNA
A;Molecule type: DNA
A;Cross-taffarences: GB:AE005174; NID:g12516091; PIDN:AAG56993.1; GSPDB:GN00145; UWGP:Z30
A;Experimental source: strain 0157:H7, substrain EDL933
A;Genetics:
A;Genetics:
A;Genetics: Z3074
C;Superfamily: phage lambda hypothetical protein 401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C;Species: Alligator mississippiensis (American alligator)
C;Date: 31-Mar-1993 #sequence_revision 31-Mar-1993 #text_change 18-Mar-1997
C;Dates: 01-Mar-1993 #sequence_revision 31-Mar-1993 #text_change 18-Mar-1997
C;Dates: 01-Mar-1993 #sequence_revision 31-Mar-1999 #text_change 18-Mar-1997
C;Dates: 01-Mar-1993 #sequence, W.H.; Parker, D.B.; McRory, J.E.; Park, M.; Lance, V.; Swanson Regul. Pept. 33, 105-116, 1991
Regul. Pept. 33, 105-116, 1991
A;Title: Primary structure of two forms of gonadotropin-releasing hormone from brains of A;Reference number: A60066, MUID:91352338; PMID:1882082
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gonadoliberin I precursor - chicken
gonadoliberin I precursor - chicken
NyAlternate names: gonadotropin-releasing hormone I
NyAlternate names: gonadotropin-releasing hormone I
C;Species: Gallus gallus (chicken)
C;Dates Gallus (chicken)
C;Gallus (chicken)
C;Gall
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A,Residues: 1-10 <LOV>
C;Superfamily: gonadoliberin
C;Keywords: amidated carboxyl end, hormone; hypothalamus; pyroglutamic acid
C;Keywords: pyrrolidone carboxylic acid (Gln) #status experimental
F;1/Modified site: amidated carboxyl end (Gly) #status experimental
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A;Status: translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-92 < DUZ>
A;Cross-references: EMBL:X69491; NID:g496326; PIDN:CAA49246.1; PID:g311612
C;Genetics:
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Pred. No. 28;
1; Mismatches 0; Indels
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Pred. No. 11;
2, Mismatches 2; Indels
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llarity 60.0%; Pred. No. 1.3;
Conservative 2; Mismatches 2; Indels
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85.7%;
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Best Local Similarity 60..
Lag 6; Conservative
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Best Local Similarity 85.7
Matches 6; Conservative
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C;Superfamily: gonadoliberin
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Matches
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                                                                                                                                 probable tail fiber protein [imported] - Escherichia coli (strain 0157:H7, substrain RIM Cispecies: Escherichia coli (5pecies: Bacherichia coli (5pace: Bacherichia coli (5pace: Bacherichia coli (5pace: Bacherichia (5pa
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C90769

probable tail fiber protein [imported] - Escherichia coli (strain O157:H7, substrain RIM C)Species: Escherichia coli
C; Species: Escherichia coli
C; Species: Bscherichia coli
C; Species: Bscherichia coli
C; Species: Bscherichia coli
C; Species: Bscherichia coli
C; Accession: C90769
R; Hayashi, T.; Makino, K.; Ohnishi, M.; Kurokawa, K.; Ishii, K.; Yokoyama, K.; Han, C.G.
ByA Res. 8, 11-22, 2001
A; Title: Complete genome sequence of enterohemorrhagic Escherichia coli O157:H7 and gench A; Reference number: A99629; MUID:21156231; PMID:11258796
A; Reference number: A99629; MUID:21156231; PMID:11258796
A; Reference number: A99629; MOID:21156231; PMID:11258796
A; Reference number: A99629; MOID:21156231; PMID:11258796
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E85816

E85816

Explain fiber protein of prophage CP-933U Z3074 [imported] - Escherichia coli (strichiante tail fiber protein of prophage CP-933U Z3074 [imported] - Escherichia coli (strichiante: Escherichiante, acoli C; Species: Escherichiante, Escherichiante
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A;Cross-references: GB:BA000007; PIDN:BAB34546.1; PID:gl3360583; GSPDB:GN00154
A;Experimental source: strain O157:H7, substrain RIMD 0509952
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A;Reference number: A85480; MUID:21074935; PMID:11206551
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Pred. No. 28;
1; Mismatches 0; Indels
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Pred. No. 28;
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A;Gene: ECall23
C;Superfamily: phage lambda hypothetical protein 401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C,Genetics:
A,Gene: ECs1808
C,Superfamily: phage lambda hypothetical protein 401
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85.7%;
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ilarity 85.7%;
Conservative
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tes 6; Conservative
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SHGWFPG 383
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les 6; Conserva
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RHPGG
gonadoliberin - pig
C;Species: Sus scrofa domestica (domestic pig)
C;Species: Sus scrofa domestica (domestic pig)
C;Species: 13-041-1991 #sequence_revision 13-041-1981 #text_change 18-Mar-1997
C;Accession: A01411
R;Baba, Y.; Matsuo, H.; Schally, A.V.
Biochem: Biophys. Res. Commun. 44, 459-463, 1971
A;Title; Structure of the porcine LH- and FSH-releasing hormone. II. Confirmation of the A;Reference number: A90172; MUID:72114303; PMID:4946067
A;Reference number: A90172; MUID:72114303; PMID:4946067
A;Residues: 1-10 cABBs
R;Matsuo, H.; Arimura, A.; Nair, R.M.G.; Schally, A.V.
Biochem: Biophys. Res. Commun. 45, 822-827, 1971
A;Title: Syntheric and natural hormones have the same physicochemical and biological A;Reference number: A90176; MUID:72065376; PMID:49442726
A;Contents: annotation; Synthesis
A;Contents: annotation; Synthesis
A;Contents: annotation and natural hormones have the same physicochemical and biological A;Reference number: A90175; MUID:72117544; PMID:4946275
A;Contents: annotation
A;Reference number: A90175; MUID:72117544; PMID:4946275
A;Contents: annotation
C;Comment: This hypothalamic hormone stimulates the secretion of both luteinizing and fc
C;Comment: This hypothalamic hormone stimulates the secretion of city C;Comment: This hypothalamic hormone stimulates the secretion of both luteinizing and fc
C;Superfamily: gonadoliberin
C;Comment: This hypothalamic charboxyl end (GIN) #status experimental
F;10/Modified site: pyxrolidone carboxyl end (GIN) #status experimental
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C;Date: 31-Dec-1991 #sequence_revision 31-Dec-1991 #text_change 18-Mar-1997
C;Date: 31-Dec-1991 #sequence_revision 31-Dec-1991 #text_change 18-Mar-1997
C;Date: 31-Dec-1991 #sequence_revision 31-Dec-1991 #text_change 18-Mar-1997
B;Burgus, R.; Butchar, M.; Amoss, M.; Ling, N.; Monahan, M.; Rivier, J.; Fellows, R.; Bl Proc. Natl. Acad. Sci. U.S.A. 69, 278-282, 1972
A;Title: Primary structure of the ovine hypothalamic luteinizing hormone-releasing facto A;Reference number: A93780; MUID:72094314; PMID:4550508
A;Accession: A93780
A;Molecule type: protein
ok, C.; Schlueter, T.; Simoes, N.; Tierrez, A.; Vazquez-Boland, J.A.; Voss, H.; Wehland, A; Title: Comparative genomics of Listeria species.
A; Reference number: AB1077; MUID:21537279; PMID:11679669
A; Reference number: AB1077; MUID:21537279; PMID:11679669
A; Status: preliminary
A; Status: preliminary
A; Molecule type: DNA
A; Residues: 1-882 <GLA>
A; Residues: 1-82 <GLA>
A; Residues: 1-82 <GLA>
A; Residues: GB:NC_03210; PIDN:CAD00947.1; PID:g16412234; GSPDB:GN00177
A; Coss-references: Strain EGD-e
C; Genetics:
A; Gene: lmo2734
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Pred. No. 1.1e+02;
0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              / Match 58.9%;
Local Similarity 71.4%;
les 5; Conservative (
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Matches
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576720
Synechocystis sp. (strain PCC 6803)
C;Species: Synechocystis sp.
C;Species: Synechocystis sp.
C;Species: Synechocystis sp.
C;Species: Synechocystis sp.
C;Accession: S76720
C;Accession: S77720
C;Accession: S777
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AE1416
sugar hydrolase homolog lmo2734 [imported] - Listeria monocytogenes (strain EGD-e)
C;Species: Listeria monocytogenes
C;Date: 27-Nov-2001 #sequence_revision 27-Nov-2001 #text_change 27-Nov-2001
C;Accession: AE1416
C;Duchaud, E.; Duchaud, E.; Durand, L.; Dussurget, O.; Entian, K.D.; Fsihi, H.
C;Cience 294, 849-852, 2001
A;Authors: Kreft, J.; Kuhn, M.; Kunst, F.; Kurapkat, G.; Madueno, E.; Maitournam, A.; Ma
                                                                                                                                                                                       Ali880

aminopeptidase (imported) - Nostoc sp. (strain PCC 7120)

C;Species Nostoc sp. PCC 7120

C;Species Nostoc sp. strain PCC 7120

C;Date: 14-Dec-2001 #sequence_revision 14-Dec-2001 #text_change 09-Dec-2002

C;Date: 14-Dec-2001 #sequence_revision 14-Dec-2001 #text_change 09-Dec-2002

C;Date: 14-Dec-2001 #sequence_revision 14-Dec-2001 #text_change 09-Dec-2002

C;Accession: Ali880

R;Kanako, T.; Nakamura, Y.; Wolk, C.P.; Kuritz, T.; Sasamoto, S.; Watanabe, A.; Iriguchi Nakazaki, N.; Shimpo, S.; Sugimoto, M.; Takazawa, M.; Yamada, M.; Yasuda, M.; Tabata, S A;Title: Complete Genomic Sequence of the Filamentous Nitrogen-fixing Cyanobacterium Ana A;Reference number: ABI807; MUDI21595285; PMID:11759840

A;Accession: All880

A;Accession: All880

A;Retidues: 1-866 <KUR
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A,Status: preliminary
A,Molecule type: DNA
A,Molecule type: DNA
A,CCESSIONES: 1-869 < KAN>
A,CCESS-references: EMBL:D90916; GB:AB001339; NID:g1653715; PIDN:BAA18632.1; PID:d101936
A,Note: the nucleotide sequence was submitted to the EMBL Data Library, June 1996
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A;Experimental source: strain PCC 7120
C;Genetics:
A;Gene: all0594
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 43; DB 2; Length 866;
Pred. No. 1.1e+02;
1; Mismatches 1; Indels
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Best Local Similarity 71.*.
5; Conservative
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Best Local Similarity 71.4
Matches 5; Conservative
                            OHWSYGLOPG 33
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323 KHWSHAW 329
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gonadoliberin precursor [validated] - human
MyAlternate names: gonadotropin releasing hormone (GnPH); luteinizing hormone releasing by MyAlternate names: gonadotropin releasing hormone (GnP); progonadoliberin
C;Species: Homo sapiens (man)
C;Species: Homo sapiens (man)
C;Ante: J. Mar-1987 #sequence revision 21-Jul-1995 #text_change 08-Dec-2000
C;Accession: S05308; A26173; A93342; A90108; A01410; S45718
R;Hayflick, J.S.; Adelman, J.P.; Seeburg, P.H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A. Description: gonadoliberin stimulates pituitary secretion of lutropin and follitropin A. Description: gonadoliberin-associated protein may have prolactin release inhibiting activity c. Superfamily: gonadoliberin
C. Keywords: amidated carboxyl end; hormone; hypothalamus; pyroglutamic acid
C. Keywords: amidated carboxyl end; hormone; hypothalamus; pyroglutamic acid
F;1-23/Domain: signal sequence #status predicted <SIG>
F;22-31/Product: gonadoliberin #status predicted <GLB>
F;22-31/Product: gonadoliberin #ssociated protein #status predicted <GAP>
F;22/Modified site: pyrrolidone carboxylic acid (Gln) (in mature form) #status predicted
F;31/Modified site: amidated carboxyl end (Gly) (amide in mature form from following gly:
N;Alternate names: luteinizing hormone releasing hormone
C;Species: Xenopus laevis (African clawed frog)
C;Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 16-Jul-1999
C;Accession: 151423
R;Hayes, W.P.; Wray, S.; Battey, J.F.
Endocrinology 114, 1835-1845, 1994
A;Title: The frog GnRH-1 gene has a mammalian-like expression pattern and conserved doma A;Reference number: 151423; MUID:9418553; PMID:8137750
A;Accession: 151423
A;Molecule type: DNA
A;Residues: 1-89 <HAY>
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R;Mason, A.U.; Hayflick, J.S.; Zoeller, R.T.; Young III, W.S.; Phillips, H.S.; Nikolics, Science 234, 1366-1371, 1986

A;Title: A deletion truncating the gonadotropin-releasing hormone gene is responsible fo A;Reference number: A47578; MUID:87069928; PMID:3024317

A;Accession: A47578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gonadoliberin precursor - mouse

Nalternate names: gonadotropin-releasing hormone (GnRH); luteinizing hormone releasing
NyAlternate names: gonadotropin-releasing hormone (GnP)
NyContains: gonadoliberin; gonadoliberin-associated protein (GnP)
C;Species: Mus musculus (house mouse)
C;Date: 31-Dec-1993 #sequence_revision 18-Mar-1997 #text_change 18-Jun-1999
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60.0%; Pred. No. 16;
tive 2; Mismatches
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les 6; Conserv
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A;Residues: 1-90 <MAS>
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Nat/K+-exchanging ATPase (EC 3.6.3.9) beta chain - dog (fragments)
N.Alternate names sodium pump beta chain; sodium/potassium-dependent pump beta chain (Spaces Canis lupus familiaris (dog)
C.Sate: 31-Nar-1988 #sequence_revision 31-Mar-1988 #text_change 19-Apr-2002
C.Accession: A24303
R.Otta, T.; Yoshida, M.; Nagano, K.; Hirano, H.; Kawamura, M.
FRBS Lett. 204, 297-301, 1986
A.Title: Structure of the extra-membranous domain of the beta-subunit of (Na,K)-ATPase A.Recession: A24303
A.Rocession: A24303
A.Molecule type: protein
A.Recibutes: 1-71 cohrs
C.Superfamily: Na+/K+-transporting ATPase beta chain
C.Keywords: hydrolase
            A;Residues: 1-10 cBUR>
A;Note: the natural and synthetic hormones have the same biological activity
C;Comment: This hypothalamic hormone stimulates the secretion of both luteinizing and C;Superfamily: gonadoliberin
C;Superfamily: gonadoliberin
C;Keywords: amidated carboxyl end; hormone; hypothalamus; pyroglutamic acid
F;1,Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
F;10/Modified site: amidated carboxyl end (Gly) #status experimental
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A;Molecule type: mRNA
A;Molecule type: CA CAES.
A;Residues: 1-67 CAES.
A;Cross-references: GB:875918; NID:9912831; PIDN:AAB33096.1; PID:9912832
C;Superfamily: gonadoliberin
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Pred. No. 1.8;
2; Mismatches 2; Indels
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Pred. No. 12;
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Pred. No. 12;
2; Mismatches
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gonadoliberin precursor - African clawed frog
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Best Local Similarity 60...
Thes 6; Conservative
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QHWSYGLRPG 15
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A, Molecule type: DNA
A, Residues: 1-92 < 80Ns
A, Residues: 1-92 < 80Ns
A, Residues: 1-92 < 80Ns
A, Cross-references: Bolds
A, U. S. Hayflick, U. S. J. Seeburg, P. H.
Proc. Natl. Acad. Sci. U. S. A. 83, 179-183, 1986
A, Title: Isolation of the gene and hypothalamic cDNA for the common precursor of gonadot A, Reference number: A94090; MUID: 86094338; PMID: 2867548
A, Molecule type: mRNA
A, Molecule type: mRNA
A, Residues: 1-92 < 80B: M12579; NID: 9204445; PIDN: AAA41263.1; PID: 9204446
B, Residues: 1-92 < 80B: M12579; NID: 910445; PIDN: AAA41263.1; PID: 9204446
A, Marchetti, B.; LeBoeuf, R. D.; Blalock, J. B.
Cell. Mol. Neurobiol. 12, 447-454, 1992
A, Fitle: Thymocytes express a mRNA that is identical to hypothalamic luteinizing hormone A, Reference number: A48410; MUID: 93105480; PMID: 1468115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A, Description: stimulates pituitary secretion of lutropin and follitropin
A,Note: gonadoliberin-associated protein may have prolactin release inhibiting activity
C;Superfamily: gonadoliberin
C;Superfamily: gonadoliberin
C;Superfamily: parentied carboxyl end; hormone; hypothalamus; placenta; pyroglutamic acid; r
F;1-23/Domain: signal sequence #status predicted <PGN>
F;24-92/Product: progonadoliberin #status predicted <GIN>
F;24-92/Product: gonadoliberin #status predicted <GIN>
F;24-32/Product: prolactin release-inhibiting factor #status predicted <PIF>
F;34/Modified site: pyrrolidone carboxylic acid (GIn) (in mature form) #status predicted F;33/Modified site: amidated carboxyl end (Gly) (amide in mature form from following gly
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R;White, S.A.; Kasten, T.L.; Bond, C.T.; Adelman, J.P.; Fernald, R.D.
Proc. Natl. Acad. Sci. U.S.A. 92, 88623-8367, 1995
A;Title: Three gonadorropin-releasing hormone genes in one organism suggest novel roles A;Reference number: I50739; MUID:95396797; PMID:7667296
                                                                 structure and hypothalamic
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C;Superfamily: gonadoliberin
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Molecule type: mRNA
Residues: 1-92 AMAI»
Residues: 1-92 AMAI»
Residues: 1-92 AMAI»
Resperimental source: thymus
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C;Species: Haplochromis burtoni
C;Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change
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R,Bond, C.T.; Hayflick, J.S.; Seeburg, P.H.; Adelman, J.P. Mol. Endocarinol. 3, 1257-1262, 1889
A,Title: The rat gonadorropin-releasing hormone: SH locus: A,Reference number: A40147; MUID:89384661; PMID:2476669
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Pred. No. 17;
2; Mismatches
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24 OHWSYGLRPG 33
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Best Local Similarity
Matches 6; Conserv
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Best Local Similarity
Matches 6; Conserv
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RHRTG

gonadoliberin precursor - rat

N;Alternate names: gonadoliberin-associated protein (GAP); gonadotropin releasing hormon

N;Contains: gonadoliberin; prolactin release-inhibiting factor

C;Species: Rattus norvegicus (Norway rat)

C;Date: 31-Mar-1988 #sequence revision 31-Mar-1988 #text_change 18-Jun-1999

C;Accession: A40147; B26173; Ā48410
                                                96
                                                                                                                                                                                                                                                                                                                                  gonadot
Nucleic Acids Res. 17, 6403-6404, 1989
A.Title: The complete nucleotide sequence of the human gonadotropin-releasing hormone gaseferance number: S05308; MUD:89366682; PMID:2671939
A.Accession: S05308
A.Accession: S05308
A.Status: translation not shown
A.Molecule type: DNA
A.Kosidues: 1-92 - KAMA
A.Kosidues: 1-93 - KAMA
A.Kosidues: 1-93 - KAMA
A.Kosidues: 1-93 - KAMA
A.Kosidues: 1-94 - KAMA
A.Kosidues: 1-95 - KA
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24 QHWSYGLRPG 33
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C;Species: Homo sapiens (man)
C;Species: Homo sapiens (man)
C;Accession: S20947; S19962 #sequence_revision 16-Sep-1992 #text_change 21-Jul-2000
C;Accession: S20947; S19962
R;Rouault, J. P.; Rimokh, R.; Tessa, C.; Paranhos, G.; Ffrench, M.; Duret, L.; Garoccio, P. EMBO J. 11, 1663-1670, 1992
EMBO J. 11, 1663-1670, 1992
A;Title: BIGI, a member of a new family of antiproliferative genes.
A;Reference number: S20947; MUID:92224907; PMID:1373383
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C;Species: Sulfolobus solfataricus
C;Date: 24-May-2001 #sequence_revision 24-May-2001 #text_change 15-Jun-2001
C;Acces 24-May-2001 #sequence_revision 24-May-2001 #text_change 15-Jun-2001
R;She, Q.; Singh, R.K.; Confalonieri, F.; Zivanovic, Y.; Allard, G.; Awayez, M.J.; Chan-**
                                                                                                                                                                                                                                                                                                                                                                                                                C;Species: Mus musculus (house mouse)
C;Date::02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 05-Nov-1999
C;Accession: 148272; S26626
R;Rouault, J.P.; Samarut, C.; Duret, L.; Tessa, C.; Samarut, J.; Magaud, J.P.
Gene 129, 303-306, 1993
A;Title: Sequence analysis reveals that the BTG1 anti-proliferative gene is conserved th: A;Reference number: 148272; MUID:93314978; PMID:8325512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Cross-references: EMBL:X61123; NID:929508; PIDN:CAA43435.1; PID:929509
A;Note: the sequence from Fig. 2 is inconsistent with that from Fig. 1 B in having 167-A:
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A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-171 cRES>
A;Cross-references: EMBL:Z16410; NID:950187; PIDN:CAA78902.1; PID:950188
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Pred. No. 30;
2; Mismatches 2; Indels
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                                                                                 Length 170;
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                                                                                                                                          Indels
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Pred. No. 30;
2; Mismatches
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                                                                                 Score 42; DB Pred. No. 30; 2; Mismatches
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A;Cross_references: GDB:137082; OMIM:109580
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Local Similarity 55.6%;
les 5; Conservative
                                                                                 57.5%;
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Best Local Similarity 55.6%;
Matches 5; Conservative
                                                                                                                                          Conservative
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                                                                                 Query Match
Best Local Similarity
Matches 5; Conserv
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A;Residues: 1-171 <ROU>
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Best Local
   C;Genetics:
A;Gene: BTG1
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Cippedies: Gallus gallus (chicken)
Cippedies: Gallus gallus (chicken)
Cippedies: Gallus gallus (chicken)
Cippedies: Ob-Jan-1995 #sequence_revision Ob-Jan-1995 #text_change 21-Jul-2000
Cipacession: 150585, 819961
R;Rouault, J.P.; Samarut, C.; Duret, L.; Tessa, C.; Samarut, J.; Magaud, J.P.
R;Rouault, J.B.; Samarut, C.; Duret, L.; Tessa, C.; Samarut, J.; Magaud, J.P.
A;Relerice: Sequence analysis reveals that the BTGI anti-proliferative gene is conserved the A;Reference number: 148272; MUID:93314978; PMID:8325512
                                                                                                                                                               C;Species: Rattus norvegicus (Norway rat)
C;Date: 02-Aug-1996 #sequence_revision 02-Aug-1996 #text_change 31-Dec-1996
C;Date: 02-Aug-1996 #sequence_revision 02-Aug-1996 #text_change 31-Dec-1996
C;Date: 02-Aug-1996 #sequence_revision 02-Aug-1996 #text_change 31-Dec-1996
R;Hamil, K.G; Hall, S.H.
Endocrinology 134, 1205-1212, 1994
A;Title: Cloning of rat Sertoli cell follicle-stimulating hormone primary response complA;Reference number: I53276; MUID:94164020; PMID:8161377
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A,Experimental source: strain 16M
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A;Residues: 1-170 <ROU>
A;Cross-references: EMBb:X64146; NID:g62857; PIDN:CAA45507.1; PID:g62858
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29;
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A,Status: preliminary; translated from GB/EWBL/DDBJ
A,Molecule type: mRNA
A,Residues: 1-157 - KRES>
A,Cross-references: GB:L26268; NID:g432344; PID:g432345
                                                                                                                                       hypothetical anti-proliferative factor - rat (fragment)
C;Species: Rattus norvegicus (Norway rat)
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Pred. No. 29;
0; Mismatches
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Similarity 75.0%;
6; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
   QHWSYGLSPG 32
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Best Local Similarity
5; Conserv?
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A;Residues: 1-167 <KUR>
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A, Status: preliminary
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hypothetical protein CAC1436 [imported] - Clostridium acetobutylicum C;Species: Clostridium acetobutylicum C;Species: Clostridium acetobutylicum C;Species: Clostridium acetobutylicum C;Date: 14-Sep-2001 #sequence_revision 14-Sep-2001 #text_change 14-Sep-2001 #Sep-2001 #sequence_revision 14-Sep-2001 #sequence_
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A:Accommental source: strain H37Rv
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R/Ole, S.T.; Brosch, R.; Parkhill, J.; Garnier, T.; Churcher, C.; Harris, D.; Gordon, S.(Ole, S.T.; Brosch, R.; Parkhill, J.; Garnier, T.; Churcher, C.; Harris, D.; Gordon, Commor, R.; Davies, R.; Devlin, K.; Feltwell, T.; Gentles, S.; Hamlin, N.; Holroyd, Batandream, M.A.; Rogers, J.; Rutter, S.; Seeger, K.; Skelton, S.; Squares, S. Nature 393, 537-544, 1998
A;Authors: Sqares, R.; Sulston, J.E.; Taylor, K.; Whitehead, S.; Barrell, B.G.
A;Atthors: Sqares, R.; Sulston, J.E.; Taylor, R.; Whitehead, S.; Barrell, B.G.
A;Atcession: B70573
A;Accession: B70573
A;Accession: B70573
A;Accession: B70573
A;Restule; precliminary; nucleic acid sequence not shown; translation not shown
A;Residues: 1-413 <COL>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Accession: A97077
A;Status: preliminary
A;Molecule type: DA
A;Molecule type: DA
A;Residues: 1-2091 «KUR>
A;Cross-references: GB:AE001437; PIDN:AAK79404.1; PID:g15024378; GSPDB:GN00168
A;Experimental source: Clostridium acetobutylicum ATCC824
C;Genetics: A;Gene: CAC1436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    hypothetical protein Rv2627c - Mycobacterium tuberculosis (strain H37RV)
C;Species: Mycobacterium tuberculosis
C;Date: 17-Jul-1998 #sequence_revision 17-Jul-1998 #text_change 22-Oct-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              55.5%; Score 40.5; DB 2; Length 413; 53.8%; Pred. No. 1.2e+02; ive 0; Mismatches 3; Indels 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 56.2%; Score 41; DB 2; Length 2091; 62.5%; Pred. No. 5e+02;
          Length 450;
          Score 41; DB 2; Length 450
Pred. No. 1.18+02;
1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1; Mismatches
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                56.2%;
llarity 62.5%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EHWGKPEIVWYPG 377
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                Query Match
Best Local Similarity
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Matches 7; Conserv
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hypothetical protein alr5007 [imported] - Nostoc sp. (strain PCC 7120)
A;Note: Nostoc sp. strain PCC 7120 is a synonym of Anabaena sp. strain PCC 7120
C;Date: 14-Dec-2001 #sequence_revision 14-Dec-2001 #text_change 09-Dec-2002
C;Accession: A62431
R;Kaneko, T.; Nakamura, Y.; Wolk, C.P.; Kuritz, T.; Sasamoto, S.; Watanabe, A.; Iriguchi R;Kaneko, T.; Nakamura, Y.; Wolk, C.P.; Kuritz, T.; Sasamoto, S.; Watanabe, A.; Iriguchi Nakazaki, N.; Shimpo, S.; Sugimoto, M.; Takazawa, M.; Yamada, M.; Yasuda, M.; Tabata, B DNA Res. B, 205-213, 2001
A;Title: Complete Genomic Sequence of the Filamentous Nitrogen-fixing Cyanobacterium Ana A;Reference number: AB1807; MUID:21595285; PMID:11759840
A;Reference number: A2431
A;Status: preliminary
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A;Experimental source: strain C-125
C;Genetics:
A;Gene: BH3535
Jong, I.; Jeffries, A.C.; Kozera, C.J.; Medina, N.; Peng, X.; Thi-Ngoc, H.P.; Redder, arrett, R.A.; Ragan, M.A.; Sensen, C.W.; Van der Oost, J.
submitted to Gensank, April 2001
A; Description: Sulfolobus solfataricus complete genome.
A; Reference number: A99139
A; Reference number: R90449
A; Rocession: F90449
A; Rocession: Poelliminary
A; Residues: 1-397 <KUR>
A; Residues: 1-397 <KUR>
A; Residues: 1-397 <KUR>
A; Coses-references: GB: AE006641; NID: G13816071; PIDN: AAK42853.1; GSPDB: GN00155
C; Genetics:
A; Cosession: SSO2743
C; Superfamily: hypothetical protein AF1590
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A;Experimental source: strain PCC 7120
A;Genteics:
A;Genteics:
C;Genteics: alr5007
C;Superfamily: Nostoc sp. cell death suppressor protein; Rieske [2Fe-28] homology
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Pred. No. 92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   57.5%; Score 42; DB 2; Length 397;
62.5%; Pred. No. 69;
tive 0; Mismatches 3; Indels
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Best Local Similarity 62.5
Matches 5; Conservative
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A; Residues: 1-450 < KUR>
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C;Date: 05-Dec-1997 #sequence_revision 05-Dec-1997 #text_change 15-Oct-1999
C;Accession: F69782
R;Kunst, F.; Ogasawara, N.; Moszer, I; Albertini, A.M.; Alloni, G.; Azevedo, V.; Berter
C; Bron, S.; Brouillet, S.; Bruschi, C.V.; Caldwell, B.; Capuano, V.; Carter, N.M.; Cha
A; Ehrlich, S.D.; Emmerson, P.T.; Entian, K.D.; Errington, J.; Fabret, C.; Ferrari, E.
Nature 390, 249-256, 1997; Fritz, C.; Fujita, M.; Fujita, Y.; Fuma, S.; Galizzi, A.; Galler
iech, J.; Harvood, C.R.; Hantut, A.; Hilbert, H.; Holdsappel, S.; Hadsono, S.; Hullo, M.F.
Koetter, P.; Koningstein, G.; Kunano, M.; Kurita, K.; Lapidus, A.; Hardinois,
A; Authors: Lauber, J.; Lazarevic, V.; Lee, S.M.; Levine, A.; Liu, H.; Masuda, S.; Maueel
Y, M.; Ogawa, K.; Ogiwara, A.; Oudega, B.; Park, S.H.; Parro, V.; Pohl, T.M.; Potreteelle
Rieger, M.; Rivolta, C.; Rocha, E.; Rosee, M.; Sadaie, Y.; Sato, T.; Scanlon,
A;Authors: Schleich, S.; Schroeter, R.; Scoffone, F.; Sekiguchi, J.; Sekowska, A.; Seror,
akuchors: Schleich, S.; Schroeter, R.; Scoffone, F.; Sekiguchi, J.; Tosaco, V.; Uchiyama,
T.; Whiteers, P.; Wipat, A.; Yamanoto, H.; Yamane, K.; Yasumoto, K.; Yaca, K.; Yoshida, K.; Accession: P69782
A; Accession: P69782
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A,Molecule Lype: DNA
A,Residues: 1-145 <PAR>
A,Cross-references: GB:AL162757; GB:AL157959; NID:g7380371; PIDN:CAB85042.1; PID:g738045
A,Experimental source: serogroup A, strain Z2491
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A;Experimental source: strain 168
C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C;Species: Neisseria meningitidis
C;Date: 05-May-2000 #sequence_revision 05-May-2000 #text_change 02-Feb-2001
C;Date: 05-May-2000 #sequence_revision 05-May-2000 #text_change 02-Feb-2001
C;Date: 05-May-2000
R;Pacshiol: 81807
Holroyd, 8:; Jagels, K.; Leather, 8:; Moule, 8.; Mungall, K.; Quail, M.A.; Rajandream, Nature 404, 502-506, 2000
A;Title: Complete DNA sequence of a serogroup A strain of Neisseria menigitidis Z2491.
A;Reference number: A81775; MUID:20222556; PMID:10761919
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C,Superfamily: ribonuclease H
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( QDGGG); QBLIGS;

T 10-OCT-2003 [Rel. 42, Last sequence update)

T 10-OCT-2003 [Rel. 42, Last sequence update)

T 10-OCT-2003 [Rel. 42, Last annotation update)

T 10-OCT-2003 [Rel. 42, Last annotation update)

Progonadoliberin II precursor (Chicken-type II gonadotropin-releasing

E rogonadoliberin II precursor (Chicken-type II gonadotropin releasing)

E hormone) (GGNRH:II) [Contains Gonadoliberin II (LH-RH II)

[Luteinizing hormone releasing hormone II] (Gonadotropin releasing)

E hormone II) (GRNRH II) (Luliberin II); GRNRH-associated peptide II].

Soryzias latipes (Medaka fish) (Japanese ricefish).

ENKaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;

Actinopterygli; Neopterygli; Teleostei; Buteleostei; Neoteleostei;

C Acanthomorpha; Acanthopterygli; Percomorpha; Atherinomorpha;

Beloniformes; Adrianichthyldae; Oryzinae; Oryzias.
                                                                                                                                                                                                                                                                                                                                                                                                                  PEBCIES-C. pallasi; TISSUE=Brain, and Pituitary;
MEDLINE=20114351; PubMed=10650929;
Carolafeld U., Powell U.F.F., Park M., Fischer W.H., Craig A.G.,
Chang J.P., Rivier J.E., Sherwood N.M.;
Primary structure and function of three gonadotropin-releasing
hormones, including a novel form, from an ancient teleost, herring.";
Endocrinology 141:505-512(2000).
-!- FUNCTION: Stimulates the secretion of gonadotropins.
-!- SUBCELLULAR LOCATION: Secreted.
-!- SUBLIBRITY: Belongs to the GRRH family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                              Lovejoy D.A., Sherwood N.M., Fischer W.H., Jackson B.C., Rivier J.E. Lee T.;
                                                                                                                                                                                                                                                                                                            "Primary structure of gonadotropin-releasing hormone from the brain of a holocephalan (ratfish: Hydrolagus colliei).";
Gen. Comp. Endocrinol. 82:152-161(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
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                SPECIES-S.acanthias; TISSUE=Brain; MEDLINES-22333010; PubMed=163133; Lovejoy D.A., Fischer W.H., Ngamvongchon S., Craig A.G., Nahorniak C.S., Peter R.E., Rivier J.E., Sherwood N.M.; "Distinct sequence of gonadotropin-relasing hormone (GRRH) in doglish brain provides insight into GRRH evolution."; proc. Natl. Acad. SGi. U.S.A. 89:6373-6377(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDIINE=20462954; PubMed=11006121;
Okubo K., Amano M., Yoshiura Y., Suetake H., Aida K.;
"A novel form of gonadotropin-releasing hormone in the medaka,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 70; DB 1; Length 10;
Pred. No. 7.3e-05;
1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A., AND TISSUE SPECIFICITY.
                                                                                                                                                                                                                      SPECIES=H.colliei; TISSUE=Brain; MEDLINE=91340067; PubMed=1678723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity 90.(
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 EHWSHGWYPG 10
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                                                                                                                                                                                                                                                                                                                                                                                                      AND FUNCTION
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -!- SUBCELLUIAN LOCATION: Secreted.
-!- TISSUE SPECIFICITY: Expressed in the cell bodies of a cluster of neurons in the midbrain tegmentum.
-!- MISCELLANDOUS: Teleost species possess three paralogous GnRHs: mdGnRH and cGnRH-II have been identified in tetrapods; sGnRH has no tetrapod ortholog and is thought to be a duplication of cGnRH-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AMIDATION (G-32 PROVIDE AMIDE GROUP) (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; AB041334; BAB16300.1; -.

EMBL; AB041334; BAC06417.1; -.

EMBL; AB041334; BAC06423.1; -.

EMBL; AB07450; BAC06423.1; -.

GO; GO:0005576; C:extracellular; ISS.

GO; GO:0005183; F:luteinizing hormone-releasing factor activity; ISS.

InterPro; IPR002012; GRR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                             SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
MEDLINE=22133199.
MEDLINE=2213319.
Pubmed=12137956;
Okubo K., Mitani H., Naruse K., Kondo M., Shima A., Tanaka M.,
Asakawa S., Shimizu N., Yoshiura Y., Aida K.;
Structural characterization of GnRH loci in the medaka genome.";
Gene 293:181-189(2002).
-1- FUNCTION: Stimulates the secretion of gonadotropins (By
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pfam; PF00446; GnRH; 1.
PROSITE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Signal;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
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T -> A (IN REF. 2; BAC06423)

Y -> F (IN REF. 2; BAC06423)

S -> N (IN REF. 2; BAC06423)

A -> T (IN REF. 2; BAC06423)
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GNRH-ASSOCIATED PEPTIDE II
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1 21 BY SIMILARITY.
22 80 PROGONADOLIBERIN II.
Biophys. Res. Commun. 276:298-303(2000)
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9311 MW;
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80 AA;
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01-UTN-1994 (Rel. 29, Created)
01-UTN-1994 (Rel. 29, Last sequence update)
10-OCT-2003 (Rel. 24, Last annotation update)
Progonadoliberin II precursor (Contains: Gonadoliberin II (Luteinizing hormone II) (Gonadotropin-releasing hormone II) (GRH-II) (LH-RH II) (LH-RH II); GNRH-associated peptide II-1;
                                                                                                                                                                                                                                                                                                                                                                                                                LAITY).
(G-34 PROVIDE AMIDE GROUP) (BY
                                                                                                                                                                                                                                                                                                                            PROSÍTE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus;
Signal; Pyrrolidone carboxylic acid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Haplochromis burtoni (Burton's mouthbrooder).
Enkaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterrygii, Neopterrygii, Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthoperrygii; Percomorpha; Perciformes; Labroidei;
Cichlidae; Astatotilapia.
NGBI_TaxID=8153;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
Dicentrarchus labrax (European sea bass).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
Actinopterygii, Neopterygii, Teleostei, Euteleostei; Neoteleostei;
Acanthomorpha, Acanthopterygii, Percomorpha; Perciformes; Percoidei;
                                                                                                                                  the
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                                                                              GONADOLIBERIN II.
GNRH-ASSOCIATED PEPTIDE II.
PYRROLIDONE CARBOXYLIC ACID
(BY SIMILARITY).
AMIDATION (G-34 PROVIDE AMIDE
SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 70; DB 1; Length 85; Pred. No. 0.00058;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                          F832C0698C842C64 CRC64;
                                                                                                                                                                                                                                                                                                                                                                   PROGONADOLIBERIN II.
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                                                                                                                                                                              simitarity/.
-!- SUBCELLULAR LOCATION: Secreted.
-!- SIMILARITY: Belongs to the GnRH family.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             95.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                          85 AA; 9646 MW;
                                           Dicentrarchus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity 90.0
9, Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OHWSHGWYPG 33
                                                                                                                                                                                                                                                                                                                   Pfam, PF00446; GnRH;
PROSITE; PS00473; GNR
                                                                       SEQUENCE FROM N.A.
                                                    NCBI_TaxID=13489;
                                                                                                                                                                           similarity)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pfam; PP00446; GnRH; 1.
PROSITE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus;
Signal; Multigene family; Pyrrolidone carboxylic acid.
SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GONADOLIBERIN II.
GONALOLIBERIN II.
GNRH-ASSOCIATED PEFTIDE II-1 (POTENTIAL)
GNRH-ASSOCIATED PEPTIDE II-2 (POTENTIAL)
PARROLIDONE CARBOXYLIC ACID.
AMIDATION (G-34 PROVIDE AMIDE GROUP).
CFRCOEDBF277365F CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PIR; A53453; A53453.
GO; GO:0005576; C:extracellular; NAS.
GO; GO:0005183; F:luteinizing hormone-releasing factor activity; NAS.
GO; GO:0007275; F:development; NAS.
InterPro; IPR002012; GRRH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Morone saxatilis (Striped bass).
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi;
Actinopterygii, Neopterygii, Teleostei, Buteleostei, Neoteleostei,
Acanthomorpha, Acanthopterygii, Percomorpha, Perciformes, Percoidei,
                                                                                                                 expression pattern in the brain.";

Proc. Natl. Acad. Sci. U. S.A. 91:1423-1427 (1994).

-! FUNCTION: Stimulates the secretion of gonadotropins.

-!, SUBCELLULAR LOCATION: Secreted.

-! TISSUE SPECTIFICITY: EXPRESSED IN ONLY ONE CELL GROUP IN THE MESENCEPHALON.

-!- SIMILARITY: Belongs to the GRRH family.
MEDLINE-94151343; PubMed-8108425;
White S.A., Bond C.T., Francis R.C., Kasten T.L., Fernald R.D.,
Adelman J.P.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 40, Last sequence update)
16-OCT-2003 (Rel. 41, Last annotation update)
Gonadoliberin Il precursor (Gonadotropin-releasing hormone (GRR+II) (LH-RH II) (Luliberin II).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 85;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                       "A second gene for gonadotropin-releasing hormone: cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROGONADOLIBERIN II.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 70; DB 1; I
Pred. No. 0.00058;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        85 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               85
64
85
85
24
33
9631 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       95.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL; L27435; AAA74993.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 EHWSHGWYPG 10
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24 QHWSHGWYPG 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
les 9, Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Moronidae; Morone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24
24
37
67
67
24
33
85 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NCBI_TaxID=34816;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GONZ MORSA
073811,
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                                                                                                                                                                                                                                                                                                                                                                                                        EMBL, U30325, AAA7547.1; -.

InterPro; IPR002012; GRH.
Pfam; PF00446; GRRH; 1.

Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus; Signal; Pyrrolidone carboxylic acid.
Signal; Pyrrolidone carboxylic acid.
CHAIN 24 85 GONADOLIBERIN II.
PEPTIDE 24 33 GONADOLIBERIN II.
PROD_RES 24 24 PROVIDE AMIDE GROUP).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-07T-1996 (Rel. 34, Created)
01-07T-1996 (Rel. 34, Last sequence update)
28-FRB-2003 (Rel. 41, Last annotation update)
Progonadoliberin IIA precursor [Cattorings Gonadoliberin II (IH-RH II)
Progonadoliberin IA precursor [Conadoliberin II (IH-RH II)
Cuteinizing hormone-releasing hormone II) (Gonadotropin-releasing
hormone II) (GnRH II) (Luliberin II); GnRH-associated peptide IIA).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GNRHAA OR GNRH2.
Carassius auratus (Goldfish).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes; Cyprinidae; Carassius.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Expression of salmon gonadotropin-releasing hormone (GnRH) and chicken GnRH-II precursor messenger ribonucleic acids in the brain and ovary of goldfish.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GONADOLIBERIN II.
GONRH-ASSOCIATED PEPTIDE II.
PYRROLIDONE CARBOXYLIC ACID.
AMIDATION (G-34 PROVIDE AMIDE GROUP).
B53165C1227722CC CRC64;
Score 70; DB 1; Length 85;
Pred. No. 0.00058;
1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE OF 33-57 FROM N.A., AND TISSUE SPECIFICITY STRAIN-COmet, and Common; TISSUE-Liver;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               86 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cloning and expression pattern of a second
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE=96276584; PubMed=8729938;
Lin X.-W., Peter R'E.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRAIN=Comet, and Common; TISSUE=1
MEDLINE=97426020; PubMed=9289408;
Lin X.-W., Peter R.E.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  85 AA; 9543 MW;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 EHWSHGWYPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24 OHWSHGWYPG 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NCBI_TaxID=7957;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CARAU
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PEPTIDE
MOD_RES
MOD_RES
SEQUENCE
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                                                                                                                                                                             This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                      InterPro; Iranouzone, PEdm; Prootek; GnRH; 1.
PROSITE; PSO0473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus; Signal; Pyrrolidone carboxylic acid.
Signal; Pyrrolidone carboxylic acid.
SIGNAL 1 23 BY SIMILARITY.
RS PROGONADOLIBERIN II.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GONADOLIBERIN II.
GRINH-ASSOCIATED PEPTIDE II.
PYRROLIDONE CARBOXYLIC ACID
(BY SIMILARITY).
AMIDATION (G-34 PROVIDE AMIDE GROUP) (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Holland M.C.H., Gothilf Y., Meiri I., King J.A., Okuzawa K.,
Elizur A., Zohar Y.
"Levels of the native forms of GnRH in the pituitary of the gilthead
seabream, Sparus aurata, at several characteristic stages of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eŭkaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Actinopterygii, Neopterygii, Teleostei, Euteleostei, Neoteleostei,
Acanthomorpha, Acanthopterygii, Percomorpha, Perciformes, Percoidei,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDINE=95083645; PubMed=7991588; Park M., Fischer W.H., Powell J.F.F., Zohar Y., Elizur A., Park M., Fischer W.H., Craig A.G., Rivier J.E., Lovejoy D.A., Sherwood N.M.; Three forms of gonadotropin-releasing hormone characterized from brains of one species.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Last sequence update)
Last annotation update)
Lrsor (Gonadotropin-releasing hormone II)
         J. Mol. Endocrinol. 21:277-289(1998).
-!- FUNCTION: Stimulates the secretion of gonadotropins (By similarity).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 70; DB 1; Length 85; Pred. No. 0.00058;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   F832D5B3BC842C64 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   85 AA
                                                                                                                     -!- SIMILARITY: Belongs to the GnRH family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gen. Comp. Endocrinol. 112:394-405(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SIMILARITY)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gonadoliberin II precursor (Gonadot (GnRH-II) (LH-RH II) (Luliberin II)
                                                                                                     -!- SUBCELLULAR LOCATION: Secreted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sparus aurata (Gilthead sea bream)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TISSUE=Brain;
MEDLINE-99061849; PubMed=9843645;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-OCT-1996 (Rel. 34, Created)
01-OCT-1996 (Rel. 34, Last seq.
28-FEB-2003 (Rel. 41, Last anno
                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL; AF056313; AAD03816.1; -.
InterPro; IPR002012; GnRH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           95.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   85 AA; 9673 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           33
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24 QHWSHGWYPG 33
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NCBI_TaxID=8175;
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P51925;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PEPTIDE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GONZ_SPAAU
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Matches

HERE REPARED OCCOOR R

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95.9%;
                                                                                                                                                                                                                                                                                                                                          86 AA; 9917 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                     9; Conservative
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                                                                                                                                                                                                                                                                                                   34
                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 EHWSHGWYPG 10
                                                                                                                                                                                                       SEQUENCE OF 25-34.
                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
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2 8 2 2 2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25
                                                                                                                                                                                                                                                                                                                                            SEQUENCE
                                                                                                                                                                                                                          PEPTIDE
PEPTIDE
MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GON2 CLA
P43306;
                                                                                                                                                                                                                                                                                                       MOD_RES
                                                                                                                                                                                       SIGNAL
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                                                                                                                                                                                                           CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
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GON2_CL
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                                                                         This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL; U30386; AAC59688.1; -.
EMBL; U40569; AAB87138.1; -.
InterPro; IPR002012; GnRH.
PEam; PF00446; GnRH; 1.
PROSITE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus; Signal; Pyrrolidone carboxylic acid.
SIGNAL 1 24 BY SIMILARITY.
CHAIN 25 86 PROGOMADOLIBERIN IIA.
PEPTIDE 25 34 GONADOLIBERIN IIA.
MOD_RES 25 PYRROLIDONE CARBOXYLIC ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Carassius auratus (Goldfish).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
Cyprinidae; Carassius.
NCBI_TaxID=7957;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28-PBB-2003 (Rel. 41, Last sequence update)
28-FBB-2003 (Rel. 41, Last annotation update)
Progonadoliberin IIB precursor (Contains: Gonadoliberin II (LH-RH I (Lhteinizing hormone-releasing hormone II) (Gonadotropin-releasing hormone II) (GnRH-associated peptide IIB); GNRH-associated peptide IIB)
                                                                                                                                                                                                                                                                                                                                                                                                                     GNRH-ASSOCIATED PEPTIDE 11A.
PYRROLIDONE CARBOXYLIC ACID
(BY SIMILARITY).
AMIDATION (G-35 PROVIDE AMIDE GROUP).
31498EDBEC9D8D54 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .
0
TISSUE SPECIFICITY: Olfactory bulbs, hypothalamus and telencephalon, midbrain and posterior brain areas. SIMILARITY: Belongs to the GNRH family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 70; DB 1; Length 86;
Pred. No. 0.00059;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A., AND TISSUE SPECIFICITY. STRAIN=Comet, and Common; TISSUE-Liver; MEDLINE=97426020; PubMed=9289408;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       86 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                34
9770 MW;
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Best Local Similarity 90.0
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 EHWSHGWYPG 10
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86 AA;
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042471;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
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entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@18b-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GNRH-ASSOCIATED PEPTIDE IIB.
PYRROLIDONE CARBOXYLIC ACID
(BY SIMILARITY).
AMIDATION (G-25 PROVIDE AMIDE GROUP) (BY
SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Clarias gariepinus (Sharptooth catfish) (African catfish).
Marayota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Actinopterygii, Neopterygii; Teleostei; Ostariophysi; Siluriformes;
Clariidae; Clarias.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE=92392313; PubMed=1520292; BOGEN J., Li K.W., Janssen-Dommerholt C., Goos H.; W., Janssen-Dommerholt C., Goos H.; "Two gonadotropin-releasing hormones from African catfish (Clarias
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TISSUB-Brain;

MEDLINE-24291651; PubMed=8020492;

BOGET J., Zandbergen T., Andersson E., Goos H.;

BOGET J., Zandbergen T., Andersson E., Goos H.;

"Isolation, characterization and expression of cDNAs encoding the catfish-type and chicken-II-type gonadotropin-releasing-hormone precursors in the African catfish.";

BUT. J. Blochem. 222:541-549(1994).
                                                                                                                                              EMBL, U40665; AAB86690.1; -.
InterPro; IPR002012; GRRH.
PFam; PF00446; GRRH; 1.
PROSITE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Signal;
Pyrrolidone carboxylic acid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
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01-NOV-1995 (Rel. 32, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Genadoliberin II precursor (Gonadotropin-releasing hormone II)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 70; DB 1; Length 86; Pred. No. 0.00059;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Indels
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Biochem. Biophys. Res. Commun. 187:127-134(1992).
-i- FUNCTION: Stimulates the secretion of gonadotropins.
-i- SUBCELLUIAR LOCATION: Secreted.
-i- SIMILARITY: Belongs to the GRRH family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AC1778CE75C1C313 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                    PROGONADOLIBERIN IIB. GONADOLIBERIN II.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         86 AA
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                                                                                                EMBL; U40567; AAB86989.1; -.
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Rutilus rutilus (Roach)
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        10
                     1 EHWSHGWYPG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 86 AA;
                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                   NCBI_TaxID=48668
                                                                                  RUTRU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE
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GONZ RANCA
                                                            RESULT 11
GONZ_RUTRU
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pfam; PF00446; GnRH; 1.
PROSITE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus;
         PIR; S45600; RHID2S.
InterPro; IPR002012; GnRH.
Pfam; PF00446; GnRH; 1.
PROSITE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus; Signal; Pyrrolidone carboxylic acid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                    Gaps
                                                                                                                              AMIDATION (G-35 PROVIDE AMIDE GROUP). 4AD9F24597E77EBF CRC64;
                                                                                                                                                                                                                                                                                                                                                                Oncorhynchus mykiss (Rainbow trout) (Salmo gairdneri)..
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygi; Neopterygii; Teleostei; Euteleostei;
Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (BY SIMILARITY).
AMIDATION (G-35 PROVIDE AMIDE GROUP)
D6EBD59151DC9915 CRC64;
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0
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Last annotation update)
List annotation update)
Lisor (Gonadotropin-releasing hormone II)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 86;
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                                                                                                                                                             Score 70; DB 1; Length 86;
Pred. No. 0.00059;
1; Mismatches 0; Indels
                                                                                              GONADOLIBERIN II.
GNRH-ASSOCIATED PEPTIDE II.
PYRROLIDONE CARBOXYLIC ACID.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PYRROLIDONE CARBOXYLIC ACID (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Penlington M.C., Submitted (SEP-1997) to the EMBL/GenBank/DDBJ databases. Submitted (SEP-1997) to the EMBL/GenBank/DDBJ databases. SUBCELLULAR LOCATION: Secreted.
-:- SUBCELLULAR LOCATION: Secreted.
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GNRH-ASSOCIATED PEPTIDE II
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                                                                                     PROGONADOLIBERIN II.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 70; DB 1; I
Pred. No. 0.00059;
1; Mismatches 0;
                                                                                                                                                                                                                                                                                      86 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Signal; Pyrrolidone carboxylic acid.
SIGNAL 1 24 BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                           Gonadoliberin II precursor (Gonadotro (GnRH-II) (LH-RH II) (Luliberin II).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; AF023618; AAB82559.1; -.
InterPro; IPR002012; GnRH.
                                                                                                                                                                                                                                                                                                          15-JUL-1998 (Rel. 36, Created)
15-JUL-1998 (Rel. 36, Last seq
28-FEB-2003 (Rel. 41, Last ann
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9723 MW;
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34
86
25
34
9766 MW;
                                                                                                                                                               95.9%;
EMBL; X78047; CAA54969.1;
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                                                                                                                                                                           Best Local Similarity 90.0
Matches 9; Conservative
                                                                                                                                                                                                                                                                                      STANDARD;
                                                                                                                                                                                                         1 EHWSHGWYPG 10
                                                                                                                                                                                                                        Query Match
Best Local Similarity
Local 9; Conserve
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86 AA;
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                                                                                                                                          86 AA;
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                                                                                              PEPTIDE
PEPTIDE
MOD_RES
MOD_RES
SEQUENCE
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PEPTIDE
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042241;
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                                                                           SIGNAL
                                                                                                                                                                                                                                                                RESULT 10
GONZ ONCMY
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                                                                                                                                                                                                                                 residues; Hormone; Amidation; Hypothalamus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes; Cyprinidae; Rutilus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AMIDATION (G-35 PROVIDE AMIDE GROUP)
(BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ..
0
               291330;
15-DEC-1998 (Rel. 37, Created)
15-DEC-1998 (Rel. 37, Last sequence update)
18-PEB-2003 (Rel. 41, Last annotation update)
28-PEB-2003 (Rel. 41, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 70; DB 1; Length 86; Pred. No. 0.00059;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GNRH-ASSOCIATED PEPTIDE II. PYRROLIDONE CARBOXYLIC ACID (BY SIMILARITY).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 931E886357715F40 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BY SIMILARITY.
PROGONADOLIBERIN II.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GONADOLIBERIN II.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 93 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT;
 PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GONZ RANCA STANDARD;
Q9DG36; Q90Y64;
10-OCT-2003 (Rel. 42, Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       95.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9838 MW;
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SOLUTION SERVICE SERVI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IsoId=09DG36-2; Sequence=VSP_050476;
-!- TISSUE SPECIFICITY: Midbrain and hindbrain.
-!- DEVELOPMENTAL STAGE: Expressed at significantly higher levels during hibernation and post-breeding. Not expressed in pituitary.
-!- SIMILARITY: Belongs to the GRRH family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AMIDATION (G-35 PROVIDE AMIDE GROUP) (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                factor activity; NAS
                                                                                                                                                                                                                                                                                                                                                                                                                             "Cloning and characterization of cDNAs encoding the GnRH1 and GnRH2 becausers from bullfrog (Rana catesbelana).";
J. Exp. Zool. 289:190-201(2001).
-i- FUNCTION: Stimulates the secretion of gonadotropins (By
10-OCT-2003 (Rel. 42, Last sequence update)
10-OCT-2003 (Rel. 42, Last annotation update)
10-OCT-2003 (Rel. 42, Last annotation update)
Progonadoliberin II precursor [Contains: Gonadoliberin II (LHRH II)
Progonadoliberin II precursor [Contains Gonadoliberin II (Gonadotropin releasing
hormone II) (GoRH II) (Luliberin II); GORH-associated peptide II
                                                                                                           GNRH2 OR GNRH II.

Sana catesbelana (Bull frog).

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea; Rana.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                InterPro; IPR002012; .....
Pfam; PF00446; GREH; 1.
PROSITE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Signal; Cleavage on pair of basic residues; Hormone; Amidation; Signal; Cleavage on pair of basic residues; Portsolidone carboxylic acid.
Alternative splicing; Pyrrolidone carboxylic acid.
                                                                                                                                                                                                                                                                                        (ISOFORMS 1 AND 2), TISSUE SPECIFICITY, AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PROGONADOLIBERIN II.
GONAADOLIBERIN II.
GONAADOLIBERIN II.
PYRRAGLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                                                                                  DEVELOPMENTAL STAGE.
TISSUE=Hindbrain,
TISSUE=Hindbrain, and Midbrain,
BEDLINE=21102951; PubMed=11170016;
Wang L., Yoo M.S., Kang H.M., Im W.B., Choi H.S., Bogerd J.,
Kwon H.B.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 70, DB 1; Length 93;
Pred. No. 0.00064;
Mismatches 0; Indels
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0, Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SIMILARITY).
Missing (in isoform 2).
/FTId=VSP_050476.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GO; GO:0005576; C:extracellular; NAS.
GO; GO:0005183; F:luteinizing hormone-releasing fa
GO; GO:0009755; F:hormone mediated signaling; NAS.
GO; GO:0000003; P:reproduction; NAS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -!- SUBCELLULÂR LOCATION: Secreted.
-!- ALTERNATIVE PRODUCTS:
Event=Alternative splicing; Named isoforms=2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IsoId=Q9DG36-1; Sequence=Displayed;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SIMILARITY)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; AF192464; AAG21894.1; -. EMBL; AF186096; AAL05971.1; -.
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                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        93 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   similarity)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Name=1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE
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PEPTIDE
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                                                                                                                                                                                                                                                                                                                                                                   White R.B., Kasten T.L., White S.A., Rissman B.F., Fernald R.D.;
"GnRH-II cDNA expression in the musk shrew.";
Submitted (NOV-1998) to the EMBL/GenBank/DDDA databases.
-!- FUNCTION: Stimulates the secretion of gonadotropins; it stimulates the secretion of both luteinizing and follicle-stimulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GON2 TUPGB STANDARD; PRT; 114 AA.

Q95336;
15-DEC-1998 (Rel. 37, Created)
28-FEB-2003 (Rel. 41, Last sequence update)
Progonadoliberin II precursor [Contains: Gonadoliberin II (LH-RH II)
[Luteinizing hormone-releasing hormone II] (Gonadotropin-releasing hormone II) (GnRH II) (GnRH II); GnRH-associated peptide II].

GNRH2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                 16-0CT-2001 (Rel. 40, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Progonadoliberin II precursor (Contains: Gonadoliberin II (LH-RH II)
Luteinizing hormone-releasing hormone II) (Gonadotropin-releasing
hormone II) (GnRH II) (Luliberin II); GnRH-associated peptide II].
                                                                                                                                                                                                  Suncus murinus (House shrew) (Musk shrew).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Insectivora; Soricidae; Crocidurinae; Suncus.
VCBI_TaxID=9378;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GROUP)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL; AF107315; AAD09114.1; -.
InterPro; IPR002012; GnRH.
PFam; PF0004673; GnRH; 1.
PROSITE; PS0473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Signal;
Pyrrolidone carboxylic acid.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (BY SIMILARITY).
AMIDATION (G-37 PROVIDE AMIDE ARB986905FB83D9DB CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 110;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GONADOLIBERIN II.
GNRH-ASSOCIATED PEPTIDE II.
PYRROLIDONE CARBOXYLIC ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Indels
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PROGONADOLIBERIN II.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 70; DB 1; I
Pred. No. 0.00075;
1; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -!- SIMILARITY: Belongs to the GnRH family.
110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              hormones (By similarity).
-!- SUBCELLULAR LOCATION: Secreted.
-!- TISSUE SPECIFICITY: MIDBRAIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                36 A
                                               (Rel. 40, Created)
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90.0%;
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     STANDARD;
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110 AA;
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ses 9; Conserv
                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                         TISSUE=Brain;
                                             16-OCT-2001
16-OCT-2001
     SUMMUS
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SEQUENCE
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PEPTIDE
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Matches
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Gaps

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.. H

9; Conservative

Matches

1 EHWSHGWYPG 10 OHWSHGWYPG 34

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25

90.06

Local Similarity

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Proc. Natl. Acad. Sci. U.S.A. 95:305-309(1998).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                         placental mammal.";
Gen. Comp. Endocrinol. 104:7-19(1996).
-!- FUNCTION: Stimulates the secretion of gonadotropins; it stimulates the secretion of both luteinizing and follicle-stimulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
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GONZ HUMAN STANCE...

GA3555, GOBEND9, CORESTO,

15-DEC-1998 (Rel. 37, Last sequence update)

15-DEC-1998 (Rel. 41, Last annotation update)

28-FEB-2003 (Rel. 41, Last annotation update)

Progonadoliberin II precursor (Contains: Gonadoliberin II (LH-RH II)

Progonadoliberin II precursor (Contains: Gonadoliberin II (LH-RH II)

Cluteinizing hormone-releasing hormone II) (Gonadotropin-releasing (Luteinizing hormone-releasing II); GnRH-associated peptide II].
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AMIDATION (G-36 PROVIDE AMIDE GROUP).
                                                                                                                                                                                                               "Characterization of two new preproGnRH mRNAs in the tree shrew:
first direct evidence for mesencephalic GnRH gene expression in a
        Tupaia glis belangeri (Common tree shrew).
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Scandentia, Tupaiidae, Tupaia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PEam; PF00446; GnRH; 1.
PROSITE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Signal;
Pyrrolidone carboxylic acid.
SIGNAL
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                                                                                                                                TISSUE=Hypothalamus;
MEDLINE=97079639; PubMed=8921350;
Kasten T.L., White S.A., Norton T.T., Bond C.T., Adelman J.P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A. (ISOFORM 1).
MEDLINE=98081869; PubMed=9413371;
White R.B., Eisen J.A., Kasten T.L., Fernald R.D.;
"Second gene for gonadotropin-releasing hormone in humans.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 70; DB 1; Length 114;
Pred. No. 0.00077;
1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROGONADOLIBERIN II.
GONADOLIBERIN II.
GNNH-ASSOCIATED PEPTIDE II.
PYRROLIDONE CARBOXYLIC ACID
(BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     680E90E1C6869EC1 CRC64;
                                                                                                                                                                                                                                                                                                                                                             -!- SUBCELLULAR LOCATION: Secreted.
-!- TISSUE SPECIFICITY: MIDBRAIN.
-!- SIMILARITY: Belongs to the GRRH family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      35 35 A
114 AA; 12123 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             95.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; U63327; AAB16838.1; -. InterPro; IPR002012; GnRH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9; Conservative
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26 QHWSHGWYPG 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NCBI_TaxID=9606;
                                                                      NCBI TaxID=37347;
                                                                                                                                                                                              Fernald R.D.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
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GONZ HUMAN
TO 043555
DT 15-DEC
DT 28-PEB
DE PROGON
DE CINTELL
DE HORMON
GN GNRH2.
OG MAMMAI
OC MAMMAI
CN NGET T
RN 11]
RP SEQUEN
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                                                       RA Deloukas P. Matthews L.H., Ashurst J., Burton J., Gilbert J.G.R.,
RA Deloukas P. Matthews L.H., Ashurst J., Babbage A.K., Bagguley C.L.,
RA Doloukas W. Starrides G., Almeida J.P., Babbage A.K., Bagguley C.L.,
RA Basley O.P., Bartes K.M., Bardes M.M., Berare D.M.,
RA Beasley O.P., Bird C.P., Blakes Y.B., Carder C., Carter N.P.,
RA Chapman J.C., Clamb M., Clark G., Clark L.M., Clark S.Y., Clee C.M.,
RA Clagg S., Cobley V.E., Collier R.E., Comnor R.E., Corby N.R.,
R. Elington A., Coville G.J., Deadman R., Dhami P.D., Dunn M.,
RA Ilington A.G., Frankland J.A., Fraser A., French L., Garner P.,
RA Grafham D.V., Griffiths C., Griffiths M.N.D., Gwilliam R., Hall R.E.,
RA Hammond S., Harley J.L., Heath P.D., Ho S., Holden J.L., Howden P.J.,
RA Kay M.P., Kimberley A.M., King A., Krights A., Laird G.K., Lawlor S.,
RA Lehvaeslaino M.H., Leversha M.A., Lloyd C., Lloyd D.M., Lovell J.D.,
RA Milne S.A., Mistry D., Moconmachle L.J., McLay K., McMurray A.A.,
RA Milne S.A., Mistry D., Moconmachle L.J., McConnachle L.J., Nowikeen R., Sims S.,
RA Skuce C.D., Smith M.L., Socht C.E., Sebra H.K., Shownkeen R., Sims S.,
RA Skuce C.D., Smith M.L., Socht C.E., Shurak B.D., Thompe A.,
RA Tracey A., Tromans A.C., Vaudin M., Wall M., Wallis J.M.,
RA Whitehead S.L., Whittaker P., Willey D.L., Milliams L., Williams S.A.,
RA Rocer M., Wray P.W., Hubbard T., Durbin R.M., Bentley D.R., Beck S.,
RA Rocer J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 comparative analysis of human chromosome 20.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ISOId=043555-3; Sequence=VSP_001826; TISSUE SPECIFICANTLY HIGHER TISSUE SPECIFICITY: MIDBRAIN; EXPRESSED AT SIGNIFICANTLY HIGHER LEVELS OUTSIDE THE BRAIN (UP TO 30-FOLD), PARTICULARLY IN THE KIDNEY, BONE MARKOW, AND PROSTATE. SIMILARITY: Belongs to the GRRH family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pfam, PF00446, GnRH; 1.
PROSTIR: PS004/31, GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Signal;
Alternative splicing; Pyrrolidone carboxylic acid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Event=Alternative splicing; Named isoforms=3;
Comment=Experimental confirmation may be lacking for some
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gonadotropins, it st. follicle-stimulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MIM; 602352; -. 600 | Graction; TAS. 60; GO:0005625; C:soluble fraction; TAS. 60; GO:0005179; F:hormone activity; TAS. 60; GO:0007165; P:signal transduction; TAS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bold=043555-2; Sequence=VSP_001825;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "The DNA sequence and comparative analysis Nature 41.865-871(2001).
-!-FUNCTION: Stimulates the secretion of the secretion of both luteinizing and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IsoId=043555-1; Sequence=Displayed;
    (ISOFORMS 1; 2 AND 3)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -1- SUBCELLULAR LOCATION: Secreted.
SEQUENCE FROM N.A. (ISOFORMS 1; 2
MEDLINE=21638749; PubMed=11780052;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL; AF036329; AAC02980.1; -.
EMBL; AF036330; AAC02981.1; -.
EMBL; AL121905; CAC10338.1; -.
EMBL; AL121905; CAC29100.1; -.
EMBL; AL121905; CAC2910.1; -.
Genew; HGNC:4420; GNRH2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         InterPro; IPR002012; GnRH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |soforms;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Genew; HGNC:4
MIM; 602352;
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ETT FFT FFT SO SET

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SECUENCE, AND FUNCTION.
SPECIFSE-C.pallasti; TISSUE-Brain, and Pituitary;
SPECIFSE-C.pallasti; TISSUE-Brain, and Pituitary;
MEDLINE-20114351; PubMed=10650929;
Carolsfeld J., Powell J.F.F., Park M., Fischer W.H., Craig A.G.,
Chang J.P., Rivter J.E., Sherwood N.M.,
Primary structure and function of three gonadotropin-releasing
hormones, including a novel form, from an ancient teleost, herring.";
Endocrinology 141:505-512(2000).
Endocrinology 141:505-512(2000).
The secretion of both luteinizing and follicle-stimulating
                                                                                                                                                                                                                                                          SPECIES=O.keta;
MEDIINE=81195140; PubMed=61411999;
Sherwood N., Eiden L., Brownstein M., Spiess J., Rivier J., Vale W.;
"Characterization of a teleost gonadotropin-releasing hormone.";
Proc. Natl. Acad. Sci. U.S.A. 80:2794-2798(1983).
                                                          Clupea pallasii (Pacific herring).

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei;
Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hormone, Amidation, Hypothalamus, Pyrrolidone carboxylic acid. MOD RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AMIDATION.
284B3233786B45A3 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Oncorhynchus keta (Chum salmon), and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             76.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10 AA; 1230 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 70.v.,
For Ti Conservative
RH III) (Luliberin III). GNRH3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 EHWSHGWYPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       salmonids.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MOD RES
MOD RES
SEQUENCE
                                                                                                                                                                                                                                 SEQUENCE
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GON3 ONCKE

D GON3 ONCKE

PRT; 10 AA.

POS3 ONCKE

PRT; 10 AA.

PRT; 10 
                      PROGONADOLIBERIN II.
GONADOLIBERIN II.
GONADOLIBERIN II.
GNRH-ASSOCIATED PEPTIDE II.
PYRROLIDONE CARBOXYLIC ACID
(BY SIMILARITY).
AMIDATION (G-34 PROVIDE AMIDE GROUP).
Missing (in isoform 2).
/FIId=VSP 001825.
Missing (In isoform 3).
/FIId=VSP 001826.
Myssing (In isoform 3).
/FIId=VSP 001826.
Mys DSSCDA14B&D6FB&D CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eŭkaryota, Metazoa, Ĉhordata, Craniata, Vertebrata, Chondrichthyes;
Elasmobranchii, Squalea, Squaloidei, Squalidae, Squalus.
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01-AUG-1992 (Rel. 23, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Gonadoliberin (Gonadotropin releasing hormone) (GnRH) (LH-RH)
(Luliberin).
                                                                                                                                                                                                                                                                                                                                           Length 120;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 62; DB 1; Length 10;
Pred. No. 0.0011;
1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hormone; Amidation; Hypothalamus; Pyrrolidone carboxylic MOD RES 1 PYRROLIDONE CARBOXYLIC ACID. MOD_RES 1 10 10 AMIDATION. 284B32337871F5A3 CRC64;
                                                                                                                                                                                                                                                                                                                                           95.9%; Score 70; DB 1; Length 120
90.0%; Pred. No. 0.00081;
ive 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Squalus acanthias (Spiny dogfish)
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Matches 8; Conservative
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120
120
120
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24 QHWSHGWYPG 33
                                                                                                                                                                                                                                                                                              120 AA;
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nes 9; Conserv
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           44664
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GONL SQUAC
P27429;
                                                                                                                                                           MOD RES
VARSPLIC
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PEPTIDE
MOD_RES
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        SIGNAL
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ADD 01-AUG

DT 01-AUG

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DT 01-AUG

DT 01-AUG

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EURATY

CO ELSEND

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                                              Gaps
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Bukaryota; Metazoa; Chordeta; Craniata; Vertebrete; Buteleostomi;
Actinopterygii; Neopterygii; Teleostei; Buteleostei;
Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
                                                                                                                                                                                                                                                                                                                         (Gonadotropin-releasing hormone III)
                                              .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TISSUE=Muscle;
Klungland H., Anderson O., Alestroem P.;
"The salmon gonadotrophin-releasing hormone encoding gene in
Score 56; DB 1; Length 10;
Pred. No. 0.008;
2; Mismatches 1; Indels
                                                                                                                                                                                                       SECUTENCE OF 1-65 FROM N.A.
MEDLINE=93386322; PubMed=1308825;
Alestroem P., Kisen G., Klungland H., Andersen O.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mol. Mar. Biol. Biotechnol. 1:420-425(1992)
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GON3 ONCMA
P30973;
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SEQUENCE
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Best Local S
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PEPTIDE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HE WELL HOLD TO THE TRANSMINATION OF THE PROPERTY OF THE PROPE
셤
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                                                                                                                                                                                                       This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce) or send an email to license@lsb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; X79710; CAA56149.1; -.
EMBL; S65869; AAD13966.1; -.
InterPro; IPR002012; GNRH.
PEfam; PF00446; GNRH; 1.
PROSITE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus; Signal; Pyrrollidone carboxylic acid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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Klungland H., Lorens J.B., Andersen O., Kisen G.O., Alestroem P.;
"The Atlantic salmon prepro-gonadotropin releasing hormone gene and
   "Fish gonadotropin-releasing hormone gene and molecular approaches for control of sexual maturation: development of a transgenic fish
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (BY SIMILARITY).
AMIDATION (G-26 PROVIDE AMIDE GROUP).
BD63C46D8228EP84 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukarycca; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Actinopterygii; Neopterygii; Teleostei; Euteleostei; Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
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092027.
15-DEC-1998 (Rel. 37, Last sequence update)
15-DEC-1998 (Rel. 41, Last annotation update)
28-FEB-2003 (Rel. 41, Last annotation update)
600nadoliberin III precursor (Gonadoriopin-releasing hormone III)
600nAL-III) (LH-RH III) (Luliberin III) (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
0
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Pred. No. 0.055;
2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GONADOLIBERIN III.
GNRH-ASSOCIATED PEPTIDE III.
PYRROLIDONE CARBOXYLIC ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Oncorhynchus tschawytscha (Chinook salmon) (King salmon)
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-!- SUBCELLULAR LOCATION: Secreted.
-!- SIMILARITY: Belongs to the GARH family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PROGONADOLIBERIN III.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BY SIMILARITY.
                                                                                     Mol. Mar. Biol. Biotechnol. 1:376-379(1992)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       70.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25 25
74 AA; 8254 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 70.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 EHWSHGWYPG 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TISSUE=Muscle;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CHAIN
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                   (See http://www.isb-sib.ch/announce/
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EMBL; S44614; AAB63599.1; -.
PIR; I51180; I51180.
InterPro; IPR02012; GnPH.
Pfam; PF00446; GnPH; 1.
PROSITE; PS00473; GNRH; 1.
PROSITE; PS00473; GNRH; 1.
Signal; Pyrrolidone carboxylic acid.
1 23
                                                                                                                                                                                           residues; Hormone; Amidation; Hypothalamus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (BY SIMILARITY).
AMIDATION (G-26 PROVIDE AMIDE GROUP).
BEAF0B783F80EF84 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Oncorhynchus masou (Cherry salmon) (Masu salmon).

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei;
Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-JUL-1993 (Rel. 26, Created)
01-JUL-1993 (Rel. 26, Last sequence update)
01-JUL-1993 (Rel. 41, Last annotation update)
28-FRB-2003 (Rel. 41, Last annotation update)
Gonadoliberin III precursor (Gonadotropin-releasing hormone III)
(GRRH-III) (LH-RH III) (Luliberin III).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 74;
                                                                                                                                                                                                                                                              BY SIMILARITY.
PROGONADOLIBERIN III.
GONADOLIBERIN III.
GNRH-ASSOCIATED PEPTIDE III.
PYRROLIDONE CARBOXYLIC ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 56; DB 1;
Pred. No. 0.055;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 82 AA.
statement is not removed.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2; Mismatches
                     entities requires a license agreement (Soor send an email to license@isb-sib.ch).
                                                                              EMBL, X79711, CAA56150.1, -.
PIR, 151092, 151092.
InterProv, 1FR002012, GRH.
Pfam, PF00446; GRH; 1.
PROSITE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Ho Signal; Pyrrolidone carboxylic acid.
NON TER 1.
BY SIMILA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      76.7%;
70.0%;
                                                                                                                                                                                                                                                                                                                                                                                                   25
8254 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STANDARD;
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15
74
74
16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OHWSYGWLPG 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
7; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                   25
74 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NCBI_TaxID=8020;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
SPECIES=O.nerka; TISSUE=Liver;
MEDLINE=96227617; PubMed=8674859;
Coe I.R., von Schalburg K.R., Sherwood N.M.;
"Characterization of the pacific salmon gonadotropin-releasing hormone gene, copy number and transcription start site.";
Mol. Cell. Endocrinol. 115:113-122(1995).
                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
SPECIES=S.salar, and S.fontinalis; TISSUE=Hypothalamus;
MEDILNE=92267241; PubMed=1587389;
Klungland H., Lorens J.B., Andersen O., Kisen G.O., Alestroem P.;
"The Atlantic salmon prepro-gonadotropin releasing hormone gene and mRNA.";
           GONADOLIBERIN III.
GURH-ASSOCIATED PEPTIDE III.
PYRROLIDONE CARBOXYLIC ACID
(BY SIMILARITY).
AMIDATION (G-34 PROVIDE AMIDE GROUP).
7595A0B8964B9B86 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                        Oncorhynchus nerka (Sockeye salmon).
Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei.
Procacanthopterygii; Salmoniformes; Salmonidae; Salmo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-JUN-1994 (Rel. 29, Created)
01-JUN-1994 (Rel. 29, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Gonadoliberin III precursor (Gonadocropin-releasing hormone III)
(GORH-III) (LH-RH III) (Luliberin III).
                                                                                                                                  .
0
                                                                                                    Score 56; DB 1; Length 82;
Pred. No. 0.061;
2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                             Salmo salar (Atlantic salmon),
Salvelinus fontinalis (Brook trout) (Brook char), and
PROGONADOLIBERIN III.
                                                                                                                                                                                                                                                       82 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mol. Cell. Endocrinol. 84:167-174(1992).
                                                                                                                                                                                                                                                       PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL; X79709; CAA56148.1; -. EMBL; X74957; CAA52912.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                               Protacanthopterygii; Salmoni
NCBI TaxID=8030, 8038, 8023;
                                                                                                       76.7%;
70.0%;
                                                               33
9184 MW;
                                                                                                                                  Conservative
                                                                                                                                                                                                                                                       STANDARD;
 1 EHWSHGWYPG 10
                                                                                                                                                                            Query Match
Best Local Similarity.
                                                               33
82 AA;
 4474
                                                                                                                                                                                                                                                      GON3 SALSA
P35629; P51920;
01-JUN-1994 (Re
                                                               MOD RES
SEQUENCE
                         PEPTIDE
MOD_RES
              PEPTIDE
 CHAIN
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SALSA
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GON3_SA
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Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus;
Signal; Pyrrolidone carboxylic acid.
23 SIGNAL.
                                                                                                                                                                                                              residues; Hormone; Amidation; Hypothalamus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-NOV-1995 (Rel. 32, Last sequence update)
10-OCT-2003 (Rel. 42, Last annotation update)
Progonadoliberin III precursor [Contains: Gonadoliberin III
(Luteinizing hormone releasing hormone III) (Gonadotropin-releasing
hormone III) (GRRH-III) (LH-RH III) (Luliberin III); GRRH-associated
peptide III).
                                                                                                                                                                                                                                                                                                                                                                                        (BY SIMILARITY).
AMIDDATION (G-34 PROVIDE AMIDE GROUP).
H -> Q.
B053F4E44A765408 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Salmo trutta (Brown trout).
Wataryota, Metacoa; Chordata, Craniata, Vertebrata, Buteleostomi;
Actinopterygii, Neopterygii, Teleostei, Buteleostei,
Protacanthopterygii, Salmoniformes; Salmo.
WCBI_TaxID=8032;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Klungland H., Anderson O., Alestroem P.; "The salmon gonadotrophin-releasing hormone encoding gene
                                                                                                                                                                                                                                                                                                                   GONADOLIBERIN III.
GNRH-ASSOCIATED PEPTIDE III.
PYRROLIDONE CARBOXYLIC ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 56; DB 1; Length 82;
Pred. No. 0.061;
2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL; X79712; CAA56151.1; -...
EMBL; X91408; CAA62751.1; -...
EMBL; X91408; CAA6657.1; -...
EMBL; D31869; EAA06667.1; -...
EMBL; 151356; 151355.
InterPro; IPR002012; GRPH.
Fram; PR00446; GRPH; 1...
PROSITE; PS00473; GNRH; 1...
PROSITE; PS00473; GNRH; 1...
CHAN, 24 82 PROGONADOLIBERIN III.
FREPTIDE 24 82 GNRH-ASSOCIATED PEPTIDE:
FREPTIDE 37 83 GNRH-ASSOCIATED PETIDE:
FREPTIDE 37 84 84 FREPTIDE:
FREPTIDE 37 84 84 FREPTIDE:
FREPTIDE 37 84 84 FREPTIDE:
FREPTIDE 37 84 84 85 FREPTIDE:
FR
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01-NOV-1995 (Rel. 32, Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL; X79713; CAA56152.1; -.
PIR; IS1365; IS1365.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               76.7%;
70.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9143 MW;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 70.0
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                         333
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             82 AA;
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VARIANT
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GON3_SALTR
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24 QHWSYGWLPG 33

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                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
MEDLINE=5538593; PubMed=7657161;
Grober M.S., Myers T.R., Marchaterre M.A., Bass A.H., Myers D.A.;
"Structure, localization, and molecular phylogeny of a GRRH cDNA from a paracanthopterygian fish, the plainfin midshipman (Porichthys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PROSITE; PS00473; GNRH; 1.

Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus; Signal; Pyrrolidone carboxylic card;
CHAIN 24 89 PROGOMADOLIBERIN III.

PEPTIDE 24 33 GONADOLIBERIN III.

PROPITIOE 37 89 GNRH-ASSOCIATED PREFIDE III (POTENTIAL).

MOD_RES 24 24 PYRROLIDONE CARBOXYLIC ACID
             GONADOLIBERIN III.
GNRH-ASSOCIATED PEPTIDE III (POTENTIAL).
PYRROLIDONE CARBOXYLIC ACID.
                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                      Ponichtys notatus (Plainfin midshipman).
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Actinopterygii, Neopterygii, Teleostei, Buteleostei, Neoreleostei,
Acanthomorpha, Paracanthopterygii, Batrachoididae, Porichthys.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AMIDATION (G-34 PROVIDE AMIDE GROUP).
AED532789B9F1475 CRC64;
                                                        AMIDATION (G-34 PROVIDE AMIDE GROUP) . 8053E9534A765408 CRC64;
                                                                                                                                                                                                                                                                                     01-OCT-1996 (Rel. 34, Created)
01-OCT-1996 (Rel. 34, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Gonadoliberin III precureor (Gonadotropin-releasing hormone III)
(GnRH-III) (LH-RH III) (Luliberin III).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 56; DB 1; Length 89;
Pred. No. 0.066;
2; Mismatches 1; Indels
                                                                                                  Score 56; DB 1; Length 82;
Pred. No. 0.061;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PROGONADOLIBERIN III.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (BY SIMILARITY).
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                                                                                                                               2; Mismatches
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10118 MW;
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82
33
82
24
33
9191 MW;
                                                                                                  76.7%;
70.0%;
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InterPro; IPR002012; GRRH.
Pfam; PF00446; GRRH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ouery Match
Best Local Similarity 70.00,
                                                                                                               Local Similarity 70.0
                                                                                                                                                                                                                                                            STANDARD;
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                                                                                                                                                          1 EHWSHGWYPG
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                          PEPTIDE
MOD_RES
MOD_RES
SEQUENCE
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SEQUENCE
                                                                                                  Query Match
                                                                                                                                                                                                                                                                          P51922;
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GON3_PORNO
ID GON3_P
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                Dicentrarchus labrax (European sea bass).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii, Neopterygii; Teleostei; Buteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Percoidei;
Moronidae; Dicentrarchus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               residues; Hormone; Amidation; Hypothalamus;
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GNRH-ASSOCIATED PEPTIDE III (POTENTIAL)
PYRROLIDONE CARBOXYLIC ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gonzalez Martinez D., Madigou T., Zmora N., Anglade I., Zanuy S., Zohar Y., Elizur A., Munoz-Cueto J.A., Kah O.; Differential expression of three different prepro-GnRH (gonadotrophin-releasing hormone) messengers in the brain of the european sea bass (Dicentrarchus labrax).";
J. Comp. Neurol. 429:144-155(2001).
-!- FUNCTION: Stimulates the secretion of gonadotropins (By similarity).
                                                                                                                   16-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 40, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Gonadoliberin III precursor (Gonadotropin-releasing hormone III)
(GRH-III) (LH-RH III) (Luliberin III).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
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Pred. No. 0.067;
2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        B06A7BA413930C67 CRC64;
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EMBL; AF22428.

Interpro; IPR002012,

Pfam; PF00446; GnEH; 1.

R Cleavage on pair of badic residues; hc..

KW Cleavage on pair of badic residues; hc..

KW SiGNAL; Pyrcolidone carboxylic acid.

FT SIGNAL 1 23 GNEHARITY.

FT GARIN 24 90 PROCONDOLIBERIN 1 37 GONDOLIBERIN 1 37 GONDOLIBER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (Rel. 32, Created)
(Rel. 32, Last sequence update)
(Rel. 41, Last annotation update)
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AMIDATION (G-34
                                         90 A.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            90 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | SIMILATION | Secreted. | SUNCELLULAR LOCATION: Secreted. | SIMILARITY: Belongs to the GRRH family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE=20540016; PubMed=11086295;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                76.78;
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                                         STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STANDARD;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NCBI_TaxID=13489;
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GON3 HAPBU
ID GON3 HAPBU
AC P45652;
DT 01-NOV-1995
DT 28-FEB-2003
                                         DICLA
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Query Match
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P51921;
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        SOUTH THE TENERS BEAR AREA BEAR AREA
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GON3 ORYLA

ID GON3 ORYLA

C 09DD49; 08JIQ3;
DT 10-OCT-2003 (Rel. 42, Created)
DT 10-OCT-2003 (Rel. 42, Last sequence update)
DT 10-OCT-2003 (Rel. 42, Last sequence update)
DT 10-OCT-2003 (Rel. 42, Last annotation update)
DT 10-OCT-2003 (Rel. 42, Last sequence update)
DE Progonadoliberin III precursor (Salmon-type gonadotropin-releasing hormone III)
DE Hormone releasing hormone III)
DE GORH III) (Luliberin III); GONGAOLIOPIN releasing hormone III)
DE GORH III) (Luliberin III); GONGAOLIOPIN releasing hormone III)
OC Bukaryota; Metazoa; Chordata; Caniata; Vertebrata; Buteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Buteleostei; Buteleostei; OC Acanthomorpha; Adrianichthyidae; Oryzinae; Oryzias.
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-!- FUNCTION: Stimulates the secretion of gonadotropins.
-!- SUBCELLUAR LOCATION: Secreted.
-!- TISSUE SPECIFICITY: EXPRESSED ONLY IN THE TERMINAL NERVE NUCLEUS
-!- SIMILARITY: Belongs to the GnRH family.
-!- SIMILARITY: Belongs to the GnRH family.
PIR; A23735; A23735.
PIR; PEROSCO12; GnRH.
PF00446; GnRH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Fram; Frovats; GRRH; 1.
PROSITE; PSO473; GNRH; 1.
Cleavage on palr of basic residues; Hormone; Amidation; Hypothalamus;
Signal; Multigene family; Pyrrolidone carboxylic acid.
                                                                                                                                                Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Labroidei;
Cichlidae; Astatotilapia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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GONADOLIBERIN III.
GORHA-ASSOCIATED PEPTIDE III (POTENTIAL)
PYRROLIDONE CARBOXYLIC ACID
(BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE-92049375; PubMed=1944299;
Bond C.T., Francis R.C., Fernald R.D., Adelman J.P.;
Koharacterization of complementary DNA encoding the precursor for gonadotropin-releasing hormone and its associated peptide from a teleost fish.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AMIDATION (G-34 PROVIDE AMIDE GROUP) B36362E9F4A53A4E CRC64;
        (Gonadotropin-releasing hormone III)
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"A novel form of gonadotropin-releasing hormone in the medaka,
Oryzias latipes.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 56; DB 1; Length 90;
Pred. No. 0.067;
2; Mismatches 1; Indels
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                                                                                                                Haplochromis burtoni (Burton's mouthbrooder)
        precursor (Gonadotro
III) (Luliberin III)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE=20462954; PubMed=11006121;
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90 AA; 10096 MW;
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Best Local Similarity 70.0%,
Best_a 7; Conservative
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GORH-III) (LH-RH
                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             [2]
SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                     NCBI_TaxID=8153;
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PEPTIDE
MOD_RES
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                                                                                                                                                                                                            similarity).
-!- SUBCELLULAR LOCATION: Secreted.
-!- TISSUE SPECIFICITY: Expressed in neuron cell bodies of the nucleus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AMIDATION (G-34 PROVIDE AMIDE GROUP) (BY
                                                                                                                                                                                                                                                                                                    olfactoretinalis.
-!- MISCELLANEOUS: Teleost species possess three paralogous GnRHs:
mdGnRH and cGnRH-II have been identified in tetrapods; sGnRH has
no tetrapod ortholog and is thought to be a duplication of cGnRH-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; AB041335; BAB16302.1; -.
EMBL; AB041335; BAC06418.1; -.
EMBL; AB074501; BAC06425.1; -.
EMBL; AB074501; BAC06425.1; -.
EMBL; JC7355; JC7395.
GO; GO:0005576; C:extracellular; ISS.
GO; GO:0005776; P:development; ISS.
InterPro; IPR002012; GRH.
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Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Actinopterygii, Neopterygii, Teleostei, Buteleostei, Neoteleostei,
Acanthomorpha, Acanthopterygii, Percomorpha, Perciformes, Percoidei,
Sparidae, Pagrus.
STRAIN=HNI, and Himedaka;
MEDUINE=22133119; PubMed=12137956;
Okubo K., Mitani H., Naruse K., Kondo M., Shima A., Tanaka M.,
Asakawa S., Shimizu N., Yoshiura Y., Aida K.;
"Structural characterization of GnRH loci in the medaka genome.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-0cT-1996 (Rel. 34, Last sequence update)
28-FBB-2003 (Rel. 41, Last annotation update)
Gonadoliberin III precursor (Gonadolropin-releasing hormone III)
(GRR-III) (LH-RH III) (Luliberin III).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Amidation; Signal;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
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GNRH-ASSOCIATED PEPTIDE III.
PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 V -> M (IN REF. 2; BAC06425)
AE0B3DC9047475B9 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 56; DB 1; Length 90; Pred. No. 0.067;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1; Indels
                                                                                                                                                        Gene 293:181-189(2002), -1- FUNCTION: Stimulates the secretion of gonadotropins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        InterFro, account of GRH; 1.
PROSITE; PSO04473, GNRH; 1.
PROSITE; PSO0473, GNRH; 1.
Cleavage on pair of basic residues; Hormone, Amidat Multigene family; Pyrrolidone carboxylic acid.
SIGNAL 90 PROGONADOLIBERIN III.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 90 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          -! - SIMILARITY: Belongs to the GnRH family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2; Mismatches
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V -> M (IN
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                                                                                                                                                                                                                                                EMBL, U30311; AAA98845.1; -.
InterPro; IPR002012; GRH.
Pfam, PF00446; GRH.
PROSITE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus;
                                                                                                                                                                                                                                                                                                                                                                Signal; Pyrrolidone carboxylic acid.
SIGNAL 1 23 BY SIMILARITY.
SIGNAL 24 90 GONADOLIBERIN III.
PEPTIDE 24 33 GONADOLIBERIN III.
PEPTIDE 37 82 GARH-ASSOCIAPTED PEPTIDE III (POTENTIAL)
MOD_RES 24 24 PYRROLIDONE CARBOXYLIC ACID
(BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
Cyprinidae; Carassius.
NCBI_TaxID=7957;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE=96276584; PubMed=8729938;
Lin X.-W., Peter R.E.;
Expression of salmon gonadotropin-releasing hormone (GnRH) and
chicken GnRH-II precursor messenger ribonucleic acids in the brain
and ovary of goldfish.";
Gen. Comp. Endocrinol. 101:282-296(1996).
-!-FUNCTION: Stimulates the secretion of gonadotropins.
-!-SUBCELLULAR LOCATION: Secreted.
-!-SUMILARITY: Belongs to the GnRH family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (G-34 PROVIDE AMIDE GROUP)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-0CT-1996 (Rel. 34, Created)
01-0CT-1996 (Rel. 34, Last sequence update)
28.FEB-2003 (Rel. 41, Last annotation update)
Gonadoliberin III precursor (Gonadotropin-releasing hormone III)
(GRH-III) (LH-RH III) (Luliberin III).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 56; DB 1; Length 90;
Pred. No. 0.067;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FB4E47EB868C2FBD CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     94 AA.
-!- SUBCELLULAR LOCATION: Secreted.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AMIDATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               76.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL, U30301; AAC59888.1; -.
InterPro; IPR002012; GnRH.
Pfam; PF00446; GnRH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 70...
7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 EHWSHGWYPG 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    90 AA;
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P51917;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOD RES
SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GNRH3
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                                                                                                                                                                                                                                                                                              This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ô
                                                                 TISSUE-Olfactory bulb,
MEDLINE-95154651; PubMed-7851723;
Okuzawa K., Araki K., Tanaka H., Kagawa H., Hirose K.;
Okuzawa K., Araki K., Tanaka H., Kagawa H., Hirose K.;
Wolecular cloning of a cDNA encoding the prepro-salmon gonadotropin-
releasing hormone of the red seabream.";
Gen. Comp. Endocrinol. 96:234-242(1994).
-!- FUNCIION: Stimulates the secretion of gonadotropins.
-!- SUNICELULIAR LOGATION: Secreted.
-!- SIMILARITY: Belongs to the GRAH family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROSTITE; POSTO, GARH; 1.

Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus; Signal; Pytrolidone carboxylic acid.

1 23 RIMILARITY.

CHAIN 24 90 PROGOMADOLIBERIN III.

PREPTIDE 37 82 GNRH-ASSOCIATED PEPTIDE III (POTENTIAL).

MOD_RES 24 24 PYRROLIDONE CARBOXYLIC ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE=99061849; PubMed=9843645;
Holland M.C.H., Gothilf Y., Meiri I., King J.A., Okuzawa K.,
Elizur A., Zohar Y.,
"Levels of the native forms of GnRH in the pituitary of the gilthead
seabream, Sparus aurata, at several characteristic stages of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eŭkaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Percoidei;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (BY SIMILARITY).
AMIDATION (G-34 PROVIDE AMIDE GROUP).
FB4E5993868C2FBD CRC64;
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01-OCT-1996 (Rel. 34, Last sequence update)
28-FRB-2003 (Rel. 41, Last annotation update)
Gonadoliberin III precursor (Gonadotropin-releasing hormone III)
(GRR-III) (LH-RH III) (Luliberin III).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
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Pred. No. 0.067;
2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Jen. Comp. Endocrinol. 112:394-405(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             90 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                         or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sparus aurata (Gilthead sea bream)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      33
10070 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL; D26108; BAA05104.1; -. PIR; I51095; I51095. Interpro; IPR002012; GRRH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 70.0%;
Matches 7; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pfam; PF00446; GnRH; 1
PROSITE; PS00473; GNRH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 EHWSHGWYPG 10
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24 QHWSYGWLPG 33
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90 AA;
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    NCBI_TaxID=143350;
                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sparidae, Sparus.
NCBI_TaxID=8175;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gonadal cycle.";
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P51923;
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GON3_SPAAU
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Gaps

CB1ED2215AA4DC4D CRC64;

10683 MW;

94 AA;

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SEQUENCE
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TISSUE-Olfactory bulb;
MEDLINE=98121986; PubMed=9460654;
MEDLINE=98121986; PubMed=9460654;
Hoole D., Arme C.;
Hoole D., Arme C.;
"Isolation and characterisation of mRNA encoding the salmon- and chicken- II type gonadotrophin-releasing hormones in the teleost fish Chilus rutilus (Cyprinidae).";
J. Mol. Endocrinol. 19:337-346(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; U60667; AAB58921.1; -.
Pfam: PF00466; GRH.
PROSTE; P800473; GRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus; Signal; Pyrrolidone carboxylic acid.
1 23 RMILARITY.
CHAIN 24 94 RNGGNADOLIBERIN III.
PEPTIDE 24 33 GONADOLIBERIN III.
MOD_RES 24 24 PYRROLIDONE CARBOXYLIC ACID
PARTIALIS. 24 PYRROLIDONE CARBOXYLIC ACID.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (BY
                                                      Hormone; Amidation; Hypothalamus;
                                                                                                                                                                           GONADOLIBERIN III.
GNRH-ASSOCIATED PEPTIDE III (POTENTIAL)
PYRROLIDONE CARBOXYLIC ACID
(BY SIMILARITY)
AMIDATION (G-34 PROVIDE AMIDE GROUP).
14405EDB32ECD2BEB CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Rutilus rutilus (Roach).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
Actinopterygii, Neopterygii; Teleostei, Ostariophysi; Cypriniformes;
Cyprinidae, Rutilus.
NCBI_TaxID=48668;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (BY SIMILARITY).
AMIDATION (G-34 PROVIDE AMIDE GROUP)
SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15-JUL-1998 (Rel. 36, Created)
15-JUL-1998 (Rel. 36, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Gonadoliberin III precursor (Gonadotropin-releasing hormone III)
(GRRH-III) (LH-RH III) (Luliberin III).
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                                                                                                                                                                                                                                                                                                                                                                                                  Score 56; DB 1; Length 94;
Pred. No. 0.07;
2; Mismatches 1; Indels
PROSITE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidat Signal; Pyrrolidone carboxylic acid.
1 23 BY SIMILARIT; CHAIN 24 PROGONADOLIBERIN III.
PEPTIDE 24 33 GONADOLIBERIN III.
PEPTIDE 24 34 GONATA SSOCIATED PEPTII MOD_RES 24 24 PYRROLIDONE CARBOXXLI (RV SIMILARITY).
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-!- SUBCELLULAR LOCATION: Secreted.
-!- SIMILARITY: Belongs to the GnRH family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRT;
                                                                                                                                                                                                                                                                                                         33
10511 MW;
                                                                                                                                                                                                                                                                                                                                                                                               76.7%;
                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 70.v
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STANDARD;
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24 QHWSYGWLPG 33
                                                                                                                                                                                                                                                                                                         33
94 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GON3 RUTRU
092106;
                                                                                                                                                                                                                                                                                                      MOD RES
SEQUENCE
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GON3_RUTRU
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GON1 CLUPA STANDARD; PRT; 10 AA.

ID GON1 CLUPA STANDARD; PRT; 10 AA.

DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2003 (Rel. 41, Last sequence update)
DT 28-FEB-2003 (Rel. 41, Last annotation update)
DE Gonadoliberin I (Gonadotropin-releasing hormone I) (GnRH-I) (LH-RH)
DB (Luliberin I).
                                                                                                                                                                                                                                                                                                                                                                                              01-JUL-1993 (Rel. 26, Created)
01-JUL-1993 (Rel. 26, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Gonadoliberin III)
(Luliberin III)
(Luliberin III)
(Euliberin III)
(Gonadotropin-releasing hormone III)
(Gonadotropin-releasing hormone III)
(Gonadotropin-III)
(Gonadotropin-III)
(Gonadotropin-III)
(Gonadotropin-III)
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(Gonadotropin-IIII)
(Gonadotropin-IIIII)
(Gonadotropin-
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Clupeomorpha; Clupeldae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
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Pred. No. 0.016;
1; Mismatches 2; Indels
   DB 1; Length 94;
                                                                     1; Indels
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284B36237AA1F5A3 CRC64;
                                    0.07;
                                                                                                                                                                                                                                                                                                                                                                                   10 AA.
Score 56; DB ]
Pred. No. 0.07;
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                   PRT;
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SEQUENCE, AND FUNCTION.
TISSUE=Brain, and Pituitary;
MEDLINE=20114351; PubMed=10650929;
Query Match
Best Local Similarity 70.0%;
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10 10
10 AA; 1277 MW;
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Best Local Similarity 70.0
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                   STANDARD;
                                                                                                                                        1 EHWSHGWYPG 10
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24 QHWSYGWLPG 33
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TISSUE=Brain;
                                                                                                                                                                                                                                                                                                                                                                                   PETMA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOD RES
MOD RES
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE
                                                                                                                                                                                                                                                                                                             RESULT 31
GON3_PETMA
ID GON3 P
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SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                         80 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        rissum=Brain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RANDY
                                                                                                                                                                                                                                                                                                         VARIANT
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22
                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
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PEPTIDE
PEPTIDE
MOD_RES
MOD_RES
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ID GONB I
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            SPETFFFFFF
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Carolsfeld J., Powell J.F.F., Park M., Fischer W.H., Craig A.G., Chang J.P., Rivier J.E., Sherwood N.M.;
"Primary structure and function of three gonadotropin-releasing hormones, including a novel form, from an ancient teleost, herring."; Endocrinology 141:505-512(2000).
-!- FUNCTION: Stimulates the secretion of gonadotropins.
-!- SUBCELLUIAR LOCATION: Secreted.
-!- SIMILARITY: Belongs to the GnRH family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-FEB-1994 (Rel. 28, Created)
01-NOV-1995 (Rel. 32, Last sequence update)
8-FEB-2003 (Rel. 41, Last amortation update)
Gonadoliberin I precursor (Gonadotropin-releasing hormone I) (GRRH-I)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (LH-RH) (Luliberin I).
Clarias gariepinus (Sharptooth catfish) (African catfish).
Eukaryota: Metazoa, Chordata, Craniata, Vertebrata; Euteleostomi;
Actinopterygii, Neopterygii; Teleostei; Ostariophysi; Siluriformes;
Clariidae; Clarias.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TISSUB=Brain;
MEDLINE-29292313; PubMed=1520292;
Bogerd J., Li K.W., Jansed-Dommerholt C., Goos H.;
"Two gonadotropin-releasing hormones from African catfish (Clarias
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bogerd J., Zandbergen T., Andersson B., Goos H.; "Isolation, characterization and expression of cDNAs encoding the caffish-type and chicken-II-type gonadotropin-releasing-hormone precursors in the African catfish."; Eur. J. Blochem. 222:541-549(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
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MOD RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 48; DB 1; Length 10; Pred. No. 0.12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AMIDATION.
284B20B72871F5A3 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           80 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE=94291651; PubMed=8020492;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EMBL; X78048; CAA54970.1; -. EMBL; X78049; CAA54971.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           65.8%;
                                                                                                                                                                                                                                                                                                                                                                                                     MOD_RES 10 10
SECUENCE 10 AA; 1105 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PIR; S45602; RHIDIS.
InterPro; IPR002012; GRRH.
Pfam; PF00446; GRRH; 1.
                                                                                                                                                                                                                                                InterPro, IPR002012; GnRH.
Pfam; PF00446; GnRH; 1.
PROSITE; PS00473; GNRH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity 70.0
hes 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 EHWSHGWYPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 QHWSHGLSPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE OF 25-31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=13013;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
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GON1_CLAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GNRH-ASSOCIATED PEPTIDE I.
SYRROLIDONE CARBOXYLIC ACID (BY
SIMILARITY).
AMIDATION (G-35 PROVIDE AMIDE GROUP) (BY
PROSITE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus;
Signal; Pyrrolidone carboxylic acid.
1 21
                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16-0CT-2001 (Rel. 40, Created)
16-0CT-2001 (Rel. 40, Last sequence update)
10-0CT-2003 (Rel. 42, Last annotation update)
10-0CT-2003 (Rel. 42, Last annotation update)
10-0CT-2003 (Rel. 42, Last annotation update)
(Trp.8 gonadoliberin precursor (Trp.8 gonadotropin-releasing hormone)
(Trp.8]GnBH) (LH-RH) (Luliberin).
(Trp.8]GnBH) (LH-RH) (Luliberin).
Rana dybowsky i (Dybovsky's frog) (Korean brown frog).
Bukaryota; Metazoa; Chordata; Carniata; Vertebrata; Buteleostomi;
Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea; Raniaes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE=20477595; PubMed=11026571;
Yoo M.S., Kang H.M., Choi H.S., Kim J.W., Troskie B.E., Millar R.P.,
                                                                                                                                                                  PYRROLIDONE CARBOXYLIC ACID.
AMIDATION (G-32 PROVIDE AMIDE GROUP).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRINTS; PRO1541; GONADOLIBRNI.
PROSITE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Signal;
Pyrrolidone carboxylic acid.
                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                              Score 48; DB 1; Length 80; Pred. No. 0.87; 2; Indels 1; Mismatches 2; Indels
                                                                                                                         GONADOLIBERIN I.
GNRH-ASSOCIATED PEPTIDE I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TRP-8 PROGONADOLIBERIN.
TRP-8 GONADOLIBERIN.
                                                                                                                                                                                                                                                               OBESEEEOF4FF861A CRC64;
                                                                                               PROGONADOLIBERIN I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     90 A.A.
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7 8
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InterPro; IPR002012; GRRH.
InterPro; IPR004079; GonadoliberinI.
Dfam; PF00446; GRRH; 1.
                                                                                                                                                                                                                                                               8893 MW;
                                                                                                                                                                                                                                                                                                                   65.8%;
                                                                                                                                                                                                                                                                                                                                          70.08;
                                                                                                                                                                                                                                                                                                                                          Local Similarity 70.0 les 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     22
33
31
47
47
60
                                                                                                                                                                                                                                                                                                                                                                                                             1 EHWSHGWYPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                               OHWSHGINPG 31
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SYNTHESIS OF 24-33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NCBI_TaxID=9031;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        hormone-I
                                                                                                                                                                                                                                                   SEQUENCE
                                                      SECUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gallus
                                                                                                                                                                                                                                                                                                                                                                                   GONI_CHICK
                                                                                                                                                                                                                                                                                                                                                                          RESULT 37
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                                                      Gaps
                                                                                                                                                                                                                                                                                                                                       Virol. 70:2339-2949(1996).

FUNCTION: Binds cooperatively single-stranded DNA in a sequence-independent manner. Involved in DNA-replication, regulation of mRNA formation, and host-range specificity. Zinc is required for DNA binding (By similarity).

SUBCELLULAR LOCATION: NUCLEAR. ACCUMULATES IN INFECTED CELLS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                       Avian adenovirus gall (strain Phelps) (Fowl adenovirus 1) (CELO).
Viruses; dsDNA viruses, no RNA stage; Adenoviridae; Aviadenovirus.
VCBI_TaxID=10553;
                                                                                                                                                                                                                                                                                                          Cotten M.; "The complete DNA sequence and genomic organization of the avian
                                                      ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                       SEGUENCE FROM N.A.
MEDLINE=96186720; PubMed=8627769;
Chiocca S., Kurzbauer R., Schaffner G., Baker A., Mautner V.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61.6%; Score 45; DB 1; Length 441; 71.4%; Pred. No. 12; ive 1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           InterPro; IPR003176; Vir DNA binding.
InterPro; IPR005376; Vir DNA Zn_bind.
Pfam; PF02236; Vir DNA binding; 1.
Pfam; PF03728; Vir DNA Zn bind; 2.
Early protein; DNA-binding; Zinc-finger; Phosphorylation.
SEQUENCE 441 AA; 49331 MW; 5E78E8684F50429F CRC64;
                               Score 46; DB 1; Length 90;
Pred. No. 1.9;
3; Mismatches 1; Indels
SIMILARITY).
C3D573E78B52ABFA CRC64;
                                                                                                                                                                       01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
01-NOV-1997 (Rel. 35, Last annotation update)
Early E2A DNA-binding protein.
                                                                                                                                                      441 AA
                                                                                                                                                      PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL; U46933; AAC54914.1; -.
HSSP: P03265; 1ADU.
          10368 MW;
                                63.0%;
                  Query Match
Best Local Similarity 60.v.,
G; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ilarity 71.4
Conservative
                                                                                                                                                     STANDARD;
                                                                          1 EHWSHGWYPG 10
                                                                                       OHWSYGLWPG 34
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176 WRHGWFP 182
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Best Local Similarity
Matches 5; Conserv
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          90 AA;
                                                                                                                                                                                                                                                                                                                              adenovirus CELO.
                                                                                                                                                      ADEG1
           SEQUENCE
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                                                                                                                              RESULT 35
DNB2 ADEG1
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Lovejoy D.A., Fischer W.H., Parker D.B., McRory J.B., Park M., Lovejoy D.A., Fischer W.H., Parker D.B., McRory J.B., Park M., Lovejoy D.A., Fischer W.H., Parker D.B., McRory J.B., Park M., Lance V., Swanson P., Rivier J.E., Sherwood N.M.; Earne V., Swanson P., Rivier J.E., Sherwood N.M.; Earne P. Parker D.B., Standards alligator (Alligator mississippiensis)."; Regul. Pept. 33:105-116(1991).

1. FINACTION: Stimulates the secretion of gonadotropins.

1. STMILARITY: Belongs to the GnRH family.

2. InterPro; IPR002012; GnRH.

2. PROSITE: PS00473; GNRH; 1.

3. PROSITE: PS00473; GNRH; 1.

3. PROSITE: PS00473; GNRH; 1.

3. MOD RES.

3. MIDATION: CARBOXYLIC ACID.

3. MIDATION: MAIDATION: CARBOXYLIC ACID.

3. MIDATION: PARROLIDONE CARBOXYLIC ACID.

4. MOD RES.

5. MIDATION: MIDATION.
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Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Archosauria, Aves, Neognathae, Galliformes, Phasianidae, Phasianinae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TISSUB-Hypothalamus;
King J.A., Millar R.P.;
"Structure of avian hypothalamic gonadotrophin-releasing hormone.";
S. Afr. J. Sci. 78:124-125(1982).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alligator mississippiensis (American alligator).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
Archosauria, Crocodylidae, Alligatorinae, Alligator.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TISSUE=Hypothalamus;
MEDLINE=82265778; PubMed=7050119;
King J.A., Millar R.P.;
"Structure of chicken hypothalamic luteinizing hormone-releasing hormone. II. Isolation and characterization.";
J. Biol. Chem. 257:10729-10732(1982).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRAIN=White leghorn;
MEDLINE=9405955; Pubmed=7902095;
Dunn I.C., Chen Y., Hook C., Sharp P.J., Sang H.M.;
"Characterization of the chicken preprogonadotrophin-releasing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .
0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 43; DB 1;
Pred. No. 0.62;
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               prmone-I gene.";
    Mol. Bndocrinol. 11:19-29(1993).
                                                                                                                                                                     TISSUE=Brain;
MEDLINE=91352338; PubMed=1882082;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        58.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10 AA; 1172 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 60.0
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 EHWSHGWYPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 OHWSYGLOPG 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Jameen H.T., Stevens P.J., Zeitler P., Lehman M.N.; Submitted (MAR-1997) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: Stimulates the secretion of gonadotropins; it stimulates the secretion of both luteinizing and follicle-stimulating hormones.
Fellows R., Blackwell R., Vale W., Guillemin R., "Prinary structure of the ovine hypothalamic luteinizing hormone-releasing factor (LRF) (LH-hypothalamic-LRF-gas chromatography-mass spectrometry-decapeptide-Edman degradation).", Proc. Natl. Acad. Sci. U.S.A. 69:278-282(1972).
-!-FUNCTION: Stimulates the secretion of gonadotropins; it stimulates the secretion of both luteinizing and follicle-stimulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15-DEC-1998 (Rel. 37, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
28-FCB-2003 (hel. 41, Last annotation update)
28-FCB-2003 (Lel. 41, Last annotation update)
28-FCB-2003 (Lel-RH I) (Lel-RH I) (Gonadoliberin I (LH-RH I) (Luteinizing hormone-I) (Gonadotropin-releasing hormone I) (Gonadotropin-releasing hormone)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mesocricetus auratus (Golden hamster).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia; Eutheria, Rodentia, Sciurognathi, Muridae, Cricetinae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PYRROLIDONE CARBOXYLIC ACID.
AMIDATION (G-11 PROVIDE AMIDE GROUP)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 42; DB 1; Length 61;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            63962A1AE319B8F0 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  63 AA.
                                                                                                                                                                                                                                                                                                          -!- SUBCELLULAR LOCATION: Secreted.
-!- SIMILARITY: Belongs to the GnRH family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUBCELLULAR LOCATION: Secreted. SIMILARITY: Belongs to the GnRH family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pred. No. 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       InterPro; IPR002012; GRRH.
InterPro; IPR004079; GonadoliberinI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pfam; PF00446; GDRH; 1.
PRINTS; PR01541; GONADOLIBRNI.
PROSITE; PS00473; GNRH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15-DEC-1998 (Rel. 37, Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL; U02517; AAA03433.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6828 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60.08;
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GNRH1 OR GNRH OR LHRH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 AA;
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NON_TER
SEQUENCE
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Best Local (
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                                                                                                                                                                                                                                                                                                                                                                               This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstands. the between the Swiss Institute of Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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PROSITE; PS0473; GNRH; 1.
Cleavage on pair of basic residues; Hormone, Amidation; Hypothalamus;
Signal; Pyrrolidone carboxylic acid.
1 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL; X69491, CAA49246.1; -.. PIR; I50644; I50644. GO; GO:0005576; C:reacellular; IDA. GO; GO:0005576; C:reacellular; IDA. GO; GO:0005183; F:luteinizing hormone-releasing factor activity; IDA. GO; GO:0007275; P:development; IDA. InterPro; IFR002012; GnRH. InterPro; IPR004012; GnadoliberinI. PF00446; GnRH; I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ovis acies (Sheep).

Bukaryoris, Mctazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15-DEC-1998 (Rel. 37, Created)
15-DEC-1998 (Rel. 37, Last sequence update)
15-DEC-1998 (Rel. 41, Last amotation update)
28-PEB-2003 (Rel. 41, Last amotation update)
Progonadoliberin I precureor [Contains: Gonadoliberin I (LH-RH I)
(Lutelnizing hormone-releasing hormone I) (Gonadotropin-releasing
hormone I) (GnRH I) (Luliberin I); GnRH-associated peptide I]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GONADOLIBERIN I.
GNRH-ASSOCIATED FEPTIDE I.
PYRROLIDONE CARBOXYLIC ACID.
AMIDBATION (G-34 PROVIDE AMIDE GROUP)
                                    Burgus R., Butcher M., Amoss M., Ling N., Monahan M., Rivier J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
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STRAIN-Western range; TISSUE-Hypothalamus;
Rodriguez E. W. Wise M.E., Somitted (OCT-1993) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61AEB7EBAF508B6A CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PROGONADOLIBERIN I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 43; DB 1
Pred. No. 5.3;
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MEDLINE=72094314; PubMed=4550508;
            MEDLINE=82265777; PubMed=7050118;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 23
24 92 EV
24 33
37 92 GY
24 24 PP
33 33 34 PP
92 AA; 10206 MW; (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  58.9%;
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Bovidae, Caprinae, Ovis.
NCBI_TaxID=9940;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 EHWSHGWYPG 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
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PEPTIDE
MOD_RES
MOD_RES
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028588;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   macaques.";
Neuroendocrinology 60:346-359(1994).
-!- FUNCTION: Stimulates the secretion of gonadotropins; it stimulates
the secretion of both luteinizing and follicle-stimulating
                                                                                                                                                                           PERMY PRO1446; GORH; 1.
PRINTS; PR01541; GONADOLIBRNI.
PROSTE; PS00473; GNRH; 1.
Clavage on pair of basic residues; Hormone; Amidation; Hypothalamus; Placenta; Pyrrolidone carboxylic acid.
                                                                                                                                                                                                                                                                                                                                                                                               AMIDATION (G-11 PROVIDE AMIDE GROUP) (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TISSUE-Hypothalamus;
MEDLINE-95124501; bubMed=7545971;
MEDLINE-95124501; bubMed=7545971;
MA Y.J. Costa M.E., Ojeda S.R.;
"Developmental expression of the genes encoding transforming growth factor alpha and its receptor in the hypothalamus of female rhesus
                                                                                                                                                                                                                                                                                                                                 APPEARS TO BE ESSENTIAL FOR BIOLOGICAL ACTIVITY (BY SIMILARITY).
PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-0CT-1996 (Rel. 34, Created)
01-0CT-1996 (Rel. 34, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Progonadoliberin I precursor [Contains: Gonadoliberin I (LH-RH I)
(Luteinizing hormone-releasing hormone I) (Gonadotropin-releasing
hormone I) (GnRH I) (Luliberin I); GnRH-associated peptide I]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
0
                                                                                                                                                                                                                                                                                        GONADOLIBERIN I.
GNRH-ASSOCIATED PEPTIDE I (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Eutele
Mammalia, Eutheria, Primates, Catarrhini, Cercopithecidae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 42, DB 1; Length 63;
Pred. No. 5.2;
2; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                             FC94995676F77180 CRC64;
                                                                                                                                                                                                                                                                        PROGONADOLIBERIN I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               67 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -!- SUBCELLULAR LOCATION: Secreted.
-!- SIMILARITY: Belongs to the GnRH family.
                                                                                                                                                                                                                                                                                                                                                                                                                 SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                  SIMILARITY)
                                                                                                                                                                                                                                                                                                                       SIMILARITY)
                                                                                                                                EMBL, U91938; AAB51302.1; -.
InterPro, IPR002012; GnRH.
InterPro, IPR004079; GonadoliberinI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (Rhesus macaque).
                                                                                                                                                                                                                                                                                                                                                                                                                              63
7370 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          57.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
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                                                                                                                                                                                                                                                                        ×63
×63
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                              63
63 AA;
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P55247;
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 between the Swiss Institute of Bioinformatics and the EMBL outstation -
the European Bioinformatics Institute. There are no restrictions on its
use by non-profit institutions as long as its content is in no way
modified and this statement is not removed. Usage by and for commercial
entities requires a license agreement (See http://www.isb-sib.ch/announce/
or send an email to license@isb-sib.ch).
and the EMBL outstation
                                                                                                                     PIR; 178541; 178541.
InterPro; IRR002012; GnRH.
InterPro; IRR004079; GonadoliberinI.
Prim; PR00466; GnRH.
PROSTIE; PR004673; GNRH; 1.
PROSITE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus; Signal; Pyrrolidone carboxylic acid.
NOW TER
SIGNAL 5 BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                            SIMILARITY),
AMIDATION (G-16 PROVIDE AMIDE GROUP) (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gonadoliberin I precursor (Gonadotropin_releasing hormone I) (GnRH-I)
(LH-RH) (Luliberin I).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                       PROGONADOLIBERIN I.
GONADOLIBERIN I.
GONAH-ASSOCIATED PEPTIDE I.
APPEARS TO BE ESSENTIAL FOR BIOLOGICAL
ACTIVITY (BY SIMILARITY).
PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Xenopus laevis (African clawed frog).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Amphibia, Batrachia, Anura, Mesobatrachia, Pipoidea, Pipidae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hayes W.P., Wray S., Battey J.F.;
"The frog gonadchropin-releasing hormone-I (GnRH-I) gene has
mammalian-like expression pattern and conserved domains in
GnRH-associated peptide, but brain onset is delayed until
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 42; DB 1; Length 67;
Pred. No. 5.5;
2; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 metamorphosis.";
Endocrinology 134:1835-1844(1994).
-I- FUNCTION: Stimulates the secretion of gonadotropins.
-I- SUBCELLUAR LOCATION: Secreted.
-I- SUBLEARITY: Belongs to the GRRH family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        505394DAA261A3F2 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-NOV-1995 (Rel. 32, Created)
01-NOV-1995 (Rel. 32, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       89 AA
                                                                                                                                                                                                                                                                                                                                                                                                                         SIMILARITY).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TISSUE=Forebrain;
MEDLINE=94185563; PubMed=8137750;
                                                                                                                 EMBL; S75918; AAB33096.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Lag 6; Conserve
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            67 AA;
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P45656;
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SEQUENCE
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PEPTIDE
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GON1 RANCA
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Kwon H.B.;
                                                                 CHAIN
PEPTIDE
PEPTIDE
ACT_SITE
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SEQUENCE
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                            01-JAN-1990 (Rel. 13, Created)
01-JAN-1990 (Rel. 13, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Progonadoliberin I precursor [Contains: Gonadoliberin I (LH-RH I)
[Luteinizing hormone-releasing hormone I) (Gonadotropin-releasing hormone I) (GRRH I) (Luliberin I); Prolactin release-inhibiting factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ince 234:1366-1371(1986).
FUNCTION: Stimulates the secretion of gonadotropins; it stimulates the secretion of conformal but of both luteinizing and follicle-stimulating
                                                                                                                                                   GONADOLIBERIN I.
GONADOTROPIN-RELEASING HORMONE ASSOCIATED
                                                                             PRINTS; PRO1541; GONADOLIBRNI.
PROSITE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus;
                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
MEDLINES-87669928 PubMed=3024317;
Mason A.J., Hayflick J.S., Zoeller R.T., Young W.S. III,
Phillips H.S., Nikolics K., Seeburg P.H.;
Adletion truncating the gonadcuropin-releasing hormone gene is
responsible for hypogonadism in the hyg mouse.";
Science 234:1366-1371(1986).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
                                                                                                                                                                                 GNRH-ASSOCIATED PEPTIDE I (GAP).
PYRROLIDONE CARBOXYLIC ACID.
AMIDATION (G-34 PROVIDE AMIDE GROUP)
                                                                                                                                                                                                                                                                 ;
0
                                                                                                                                                                                                                                         Score 42; DB 1; Length 89;
Pred. No. 7.2;
2; Mismatches 2; Indels
                                                                                                                                                                                                                     6F4F36FBAE0D4284 CRC64;
                                                                                                                                        PROGONADOLIBERIN I.
                                                                                                                                                                                                                                                                                                                                                                      90 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -!- SUBCELLULAR LOCATION: Secreted.
-!- SIMILARITY: Belongs to the GRRH family.
 or send an email to license@isb-sib.ch)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MGD; MGI:95789; Gnrh.
InterPro; IPR002012; GnRH.
InterPro; IPR004079; GonadoliberinI.
                   EMBL; 128040; AAA49728.1; -.
PIR; I51423; I51423.
InterPro; IPR002012; GnRH.
InterPro; IPR004079; Gonadoliberini.
Pfam; PF00446; GnRH; 1.
                                                                                                              Signal; Pyrrolidone carboxylic acid.
SIGNAL 23
                                                                                                                                                                                                                     10246 MW;
                                                                                                                                                                                                                                           57.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL; M14872; AAA37717.1; -.
                                                                                                                                                                                                                                                                    6; Conservative
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                                                                                                                                        33
89
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33
33
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mus musculus (Mouse).
                                                                                                                                                                                                                                                      Best Local Similarity
                                                                                                                                                                                                                     89 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GNRH1 OR GNRH.
                                                                                                                                                                                                                                                                                                                                                                       MOUSE
                                                                                                                                                                                                                     SEQUENCE
                                                                                                                                                                                                                                            Query Match
                                                                                                                                      CHAIN
PEPTIDE
PEPTIDE
                                                                                                                                                                                 PEPTIDE
MOD_RES
MOD_RES
                                                                                                                                                                                                                                                                                                                                                RESULT 42
GON1 MOUSE
ID GON1 MOI
AC P13562;
                                                                                                                                                                                                                                                                    Matches
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GO; GO:0005576; C:extracellular; NAS.
GO; GO:0005183; F:luteinizing hormone-releasing factor activity; NAS.
GO; GO:00009755; P:hormone mediated signaling; NAS.
GO; GO:000003; P:reproduction; NAS.
InterPro; IPR002012; GnRH.
InterPro; IPR004019; GnRH.
PFfam; PF00446; GRRH; 1.
PRINTS; PR01541; GONADOLIBRNI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10-OCT-2003 (Rel. 42, Created)
10-OCT-2003 (Rel. 42, Last sequence update)
10-OCT-2003 (Rel. 42, Last annotation update)
Prognadoliberin I precursor [Contains: aGnadoliberin I (LHRH I)
Cluteinizing hormone releasing hormone I) (Gonadotropin releasing hormone I) (Gonadotropin releasing hormone I) (GARH I) (Luliberin I); GRRH-associated peptide I (GAPPI)].
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                  Hormone; Amidation; Hypothalamus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "Cloning and characterization of cDNAs encoding the GnRH1 and GnRH2 precursors from bullfrog (Rana catesbeiana)."; J. Exp. Zool. 289:190-201(2001).
-1- FUNCTION: Stimulates the secretion of gonadotropins (By
                                                                                                                                                                                                                                   PROLACTIN RELEASE-INHIBITING FACTOR I. APPEARS TO BE ESSENTIAL FOR BIOLOGICAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       similarity).
--- SUBCELLULAR LOCATION: Secreted.
--- TISSUE SPECIFICITY: Forebrain.
--- DEVELOPMENTAL STAGE: Expressed at significantly higher levels during post-breeding. Not expressed in pituitary..
--- SIMILARITY: Belongs to the GRRH family.
                                                                                                                                                                                                                                                                                                                                                         GROUP)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rana catesbeiana (Bull frog).
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea; Ranidae; Rana
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A., TISSUE SPECIFICITY, AND DEVELOPMENTAL STAGE
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MEDLINE=21102951; PubMed=11170016;
Wang L., Yoo M.S., Kang H.M., Im W.B., Choi H.S., Bogerd J.,
                                                                                                                                                                                                                                                                                                                      PYRROLIDONE CARBOXYLIC ACID.
AMIDATION (G-32 PROVIDE AMIDE
1C0766FA4826E4D9 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 42, DB 1, Length 90;
Pred. No. 7.3;
2; Mismatches 2; Indels
                                                                                                                                                                              PROGONADOLIBERIN I.
Pfam; PF00446; GnRH; 1.
PRINTS; PR01541; GONDOLIBRNI.
PROSITE; PS00473; GNRH; 1.
PROSITE; PS00473; GNRH; 1.
Placevage on pair of basic residues; Hormone; A Placenta; Signal; Pyrrolidone carboxylic acid.
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31
10337 MW;
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31
24
24
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Best Local Similarity
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Baba Y., Arimura A., Schally A.V.;
"On the tryptophan residue in porcine LH and FSH-releasing hormone.";
Blochem. Biophys. Res. Commun. 45:483-487 (1971).
-!- FUNCTION: Stimulates the secretion of gonadotropins; it stimulates the secretion of both luteinizing and follicle-stimulating
                                                                                                                                                                                              (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SYNTHESIS OF GONADOLIBERIN.
MEDLINE=72065376; PubMed=4942726;
Matsuo H., Arimura A., Nair R.M.G., Schally A.V.;
"Synthesis of the porcine LH- and FSH-releasing hormone by the solid-
                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-00T-1996 (Rel. 34, Created)
01-0CT-1996 (Rel. 34, Last sequence update)
028-FEB-2003 (Rel. 41, Last annotation update)
Progonadoliberin I precursor [Contains: Gonadoliberin I (LH-RH I)
Cluteinizing hormone-releasing hormone I) (Gonadotropin-releasing
hormone I) (GnRH I) (Luliberin I); GnRH-associated peptide I].
                                                                                                                                                                                            AMIDATION (G-35 PROVIDE AMIDE GROUP)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sus scrofa (Pig).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Cetartiodactyla, Suina, Suidae, Sus.
NCBI_TaxID=9823;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDINE=72114303; PubMed=4946067; Baba X., Matsuv H., Schally A.V.; "Structure of the porcine LH- and FSH-releasing hormone. II. Confirmation of the proposed structure by conventional sequential
                                        PROSITE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Signal;
                                                                                                                                                                                                                                                                                       ô
                                                                                                                                                SIMILARITY).
PYRROLIDONE CARBOXYLIC ACID (BY SIMILARITY).
                                                                                                    PROGONADOLIBERIN I.
GONADOLIBERIN I.
GNRH-ASSOCIATED PEPTIDE I (BY
                                                                                                                                                                                                                                                      Score 42; DB 1; Length 90;
Pred. No. 7.3;
2; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SUBCELLULAR LOCATION: Secreted.
SIMILARITY: Belongs to the GARH family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TISSUE-Hypothalamus;
Weener G.D., Matteri R.L., Becker B.A.;
Submitted (MAY-1994) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                           SIMILARITY).
317203B4E3DA2FE7 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Biochem. Biophys. Res. Commun. 44:459-463(1971)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   lochem. Biophys. Res. Commun. 45:822-827(1971)
                                                                                                                                                                                                                                                                                                                                                                                                                          91 AA
PROSITE; PS00473; GNKn,
Cleavage on pair of basic re.
Pyrrolidone carboxylic acid.
TGNAL 25 90
25 34
                                                                                                                                                                                                                           10291 MW;
                                                                                                                                                                                                                                                        57.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SYNTHESIS OF GONADOLIBERIN
                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                          STANDARD;
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                                                                                                                                                                                                                                                                   Local Similarity
es 6, Conserv
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                                                                                                                                                                                                                           90 AA;
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                                                                                                                                                                                                                           SEQUENCE
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                                                                                                                                                                                              MOD RES
                                                                                                                                                                                                                                                                        Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                            RESULT 44
GON1_PIG
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use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIINE-86094338; PubMed=2867548; Adelman J.P., Mason A.J., Hayflick J.S., Seeburg P.H.; Isolation of the gene and hypothalamic cDNA for the common precursor of gonadotropin-releasing hormone and prolactin release-inhibiting
                                                         EMBL, 122864, AAA31066.1; ...
INTERPO, IRRO04012; GnRH.
INTERPO, IRRO04079; Gonadoliberini.
PEfan, PF00446; GnRH; 1.
PRINTS; PR01541; GONADOLIBRNI.
PR05ITE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus; Placenta; Signal; Pyrrolidone carboxylic acid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE=89366682; PubMed=2671939;
Hayflick J.S., Adelman J.P., Seeburg P.H.;
"The complete nucleotide sequence of the human gonadotropin-releasing
                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Seeburg P.H., Adelman J.P.; "Characterization of cDNA for precursor of human luteinizing hormone
                                                                                                                                                                                                                   GONADOLIBERIN I.
GNRH-ASSOCIATED PEPTIDE I.
APPEARS TO BE ESSENTIAL FOR BIOLOGICAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21-JUL-1986 (Rel. 01, Created)
01.APR-1988 (Rel. 07, Last sequence update)
28-FBR-2003 (Rel. 41, Last annotation update)
Progonadoliberin I precursor [Contains: Gonadoliberin I (LH-RH I)
(Luteinizing hormone-releasing hormone I) (Gonadotropin-releasing hormone I) (GnRH I) (Luliberin I) (Gonadorelin); GnRH-associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (Human).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                    GROUP)
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                                                                                                                                                                                                                                                                                  AMIDATION (G-34 PROVIDE AMIDE 8340474F32DDAA99 CRC64;
                                                                                                                                                                                                                                                                 PYRROLIDONE CARBOXYLIC ACID. AMIDATION (G-34 PROVIDE AMID
                                                                                                                                                                                                                                                                                                                             DB 1, Length 91,
                                                                                                                                                                                                                                                                                                                                                        2; Indels
                                                                                                                                                                                                 PROGONADOLIBERIN I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               factor in human and rat.";
Proc. Natl. Acad. Sci. U.S.A. 83:179-183(1986).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       92 AA
                                                                                                                                                                                                                                                                                                                                                          2; Mismatches
                                                                                                                                                                                                                                                                                                                              Score 42;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A., AND VARIANT SER-16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                hormone gene.";
Nucleic Acids Res. 17:6403-6403(1989)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE=85012739; PubMed=6090951;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE OF 24-33.
MEDLINE=83126573; PubMed=6760865;
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33
10090 MW;
                                                                                                                                                                                                                                                                                                                             57.5%;
                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 60.0...
Best Local 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nature 311:666-668(1984)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STANDARD;
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33
26
26
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GNRH1 OR GNRH OR LHRH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               [2]
SEQUENCE FROM N.A.
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33
91 AA;
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SEQUENCE
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PEPTIDE
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HUMAN
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GON1_HU
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Pfam; PF00446; GnRH; 1
                        of human genes
         VARIANT SER-16
                                     Lander E.S.;
                                                      (Serono)
                   Lander E.S.
                                        Genet
                                                                                                                       PEPTIDE
PEPTIDE
ACT_SITE
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MOD_RES
VARIANT
                             ERRATUM.
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-!- FUNCTION: Stimulates the secretion of the secretion of both luteinizing and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cell. Mol. Neurobiol. 12:447-454(1992)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         M31670; AAA41264.1; -.
M15527; AAA42141.1; ALT_SEQ.
M15529; AAA42139.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   l. Endocrinol. 3:1257-1262(1989)
                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
MEDLINE=86094338; PubMed=2867548;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE=93105480; PubMed=1468115;
                                                                                                                                                                                          01-APR-1988 (Rel. 07, Created)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAA41263.1;
AAA41264.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    lamic expression."
                                                                                                                                                     STANDARD;
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24 QHWSYGLRPG
                  1 EHWSHGWYPG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=10116;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          M12579;
                                                                                                                                                                                                                                                                                                                             GNRH1 OR GNRH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SSUE=Heart
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ONA locus.
                                                                                                                                                 GON1 RAT
P07490;
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EMBL;
EMBL;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                            FUNCTION: Stimulates the secretion of gonadotropins; it stimulates the secretion of both luteinizing and follicle-stimulating
                                                                                                                                                                                                                 "Characterization of single-nucleotide polymorphisms in coding regions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Prints, PRO1446; GRRH, 1.

PRINTS, PRO1541; GONADOLIBRNI.

PROSITE; PRO1541; GONADOLIBRNI.

Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus; Placenta; Pharmaceutical; Signal; Polymorphism;

Pyrrolidone carboxylic acid.

SIGNAL

CHAIN

24

92

PROGONADOLIBERIN I.

PEPTIDE

24

33

GONADOLIBERIN I.

PEPTIDE

37

92

GRRH-ASSOCIATED PEPTIDE I.

APPEARS, TO BE ESSENTIAL FOR'BIOLOGICAL

APPEARS, TO BE ESSENTIAL FOR'BIOLOGICAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MIM; 152760; -. Goluble fraction; TAS. GO:0005625; C:soluble fraction; TAS. GO:0005625; C:soluble fraction; TAS. GO:0005183; F:luteinizing hormone-releasing factor activity; TAS. GO:0007267; P:cell-cell signaling; TAS. GO:0007275; P:development; TAS. GO:00007275; P:development; TAS. GO:00007165; P:signal transduction of cell proliferation; TAS. GO:0007165; P:signal transduction; TAS. InterPro; IPR0040715; GAH.
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                                                                                                                                                                                                                                                                                                         Cargill M., Altshuler D., Ireland J., Sklar P., Ardlie K., Patil N., Shaw N., Lane C.R., Lim E.P., Kalyanaraman N., Nemesh J., Ziaugra L., Friedland L., Rolfe A., Warrington J., Lipshutz R., Daley G.Q.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       the names Factrel (Ayerst Labs), Pharmaceuticals) and Relisorm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GONADOLIBERIN I.
GRRH-ASSOCIATED PEPTIDE I.
APPERRS TO BE ESSENTIAL FOR'BIOLOGICAL
ACTIVITY.
                                                                                                                  MEDLINE=99318093; PubMed=10391209; Sklar P., Ardlie K., Patil N Cargill N., Altebhuler D., Ireland G., Sklar P., Arenesh J., Ziaugra Shaw N., Lane C.R., Lim E.P., Ralyanaraman N., Nemesh J., Ziaugra Friedland L., Rolfe A., Warrington J., Lipshutz R., Daley G.Q.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PYRROLIDONE CARBOXYLIC ACID.
AMIDMION (G-34 PROVIDE AMIDE GROUP)
W -> S (in dbSNP:6185).
FTIA-VAR_013943.
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Tan L., Rousseau P.; munoreactive LHRH-like peptide mathe chemical identity of the immunoreactive LHRH-like peptide blosynthesized in the human placenta."; Blochem. Biophys. Res. Commun. 109:1061-1071(1982).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 42; DB 1; Length 92;
Pred. No. 7.4;
2; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30A72221B076FA79 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -!- SIMILARITY: Belongs to the GnRH family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PHARMACEUTICAL: Available under
Lutrepulse or Lutrelef (Ferring
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUBCELLULAR LOCATION: Secreted.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL; X01059; CAA25526.1; -.
EMBL; M12578; AAA35916.1; -.
EMBL; X15215; CAA33285.1; -.
PIR; S05308; RHUG.
Genew; HGWC:4419; GNRH1.
MIM; 152760; -.
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                                                                                                                                                                                                                                                       Nat. Genet. 22:231-238(1999).
                                                                                                                                                                                                                                                                                                                                                                                              23:373-373 (1999)
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Matches 6; Conservative
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01.4PR.1988 (Rel. 07, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Progonadoliberin I precursor [Contains: Gonadoliberin I (LH-RH I)
[Luteintzing hormone-releasing hormone I) (Gonadotropin-releasing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Adelman J.P., Mason A.J., Hayflick J.S., Seeburg P.H.; "Isolation of the gene and hypothalamic cDNA for the common precursor of gonadorropin-releasing hormone and prolactin release-inhibiting factor in human and rate." Proc. Natl. Acad. Sci. U.S.A. 83:179-183(1986).
                                                                                                                                                                                                                                                                                                                Rattus norvegicus (Rat).
Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalla; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE=87149087; PubMed=3547652; Adelman J.P., Bond C.T., Douglass J., Herbert E.; "Two mammalian genes transcribed from opposite strands of the same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIINE=89384661; PubMed=2476669;
Bond C.T., Hayflick J.S., Seeburg P.H., Adelman J.P.;
"The rat gonadotropin-releasing hormone: SH locus: structure and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gonadotropins; it st
follicle-stimulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Maier C.C., Marchetti B., Leboeuf R.D., Blalock J.E.;
"Thymocyres express a mRNA that is identical to hypothalamic luteinizing hormone releasing hormone mRNA.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -i- SUBCELLULAR LOCATION: Secreted.
-i- TISSUE SPECIFICITY: Central nervous system.
-i- SIMILARITY: Belongs to the GnRH family.
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                                                                                                                                                                                PRINTS; PRO1541; GONADOLIBRNI.
PROSITE; PS00473; GONADOLIBRNI.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus;
Placenta; Signal; Pyrrolidone carboxylic acid.
1 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                     GONADOLIBERIN I.
PROLACTIN RELEASE-INHIBITING FACTOR I.
APPEARS TO BE ESSENTIAL FOR BIOLOGICAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15-DEC-1998 (Rel. 37, Created)
15-DEC-1998 (Rel. 37, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Progonadoliberin I precursor [Contains: Gonadoliberin I (LH-RH I)
(Luteinizing hormone-releasing hormone I) (Gonadotropin-releasing
hormone I) (GnRH I) (Luliberin I); GnRH-associated peptide I].
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Lupaia glis belangeri (Common tree shrew).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Scandentia; Tupaiidae; Tupaia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GROUP)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    first direct evidence for mesencephalic GnRH gene expression in
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TISSUEHYPOCHBAlamus;
MEDLINE-9709539; PubMed=8921350;
Mascen T.L., White S.A., Norton T.T., Bond C.T., Adelman J.P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AMIDATION (G-34 PROVIDE AMIDE 494B5C64DA8A3EB3 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 42; DB 1; Length 92;
Pred. No. 7.4;
2; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACTIVITY.
PYRROLIDONE CARBOXYLIC ACID.
                                                                                                                                                                                                                                                                                                                                                                                                   PROGONADOLIBERIN I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SUBCELLULAR LOCATION: Secreted. SIMILARITY: Belongs to the GRRH family.
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Gen. Comp. Endocrinol. 104:7-19(1996).
-!- PUNCTION: Stimulates the secretion of
the secretion of both luteinizing and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                InterPro; IPR002012; GnRH.
InterPro; IPR004079; GonadoliberinI.
                                                                           InterPro; IPR002012; GnRH.
InterPro; IPR004079; GonadoliberinI
Pfam; PF00446; GnRH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT;
EMBL; M15528; -; NOT_ANNOTATED_CDS.
PIR; A40147; RHRTG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pfam, PF00446; GRRH, 1.
PRINTS; PR01541; GONADOLIBRNI.
PROSITE; PS00473; GNRH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10500 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 57.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OHWSYGLRPG 33
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6; Conserva
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Q95335;
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Best Local S
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SEQUENCE
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AMIDATION (G-34 PROVIDE AMIDE GROUP) (BY
Hormone; Amidation; Hypothalamus;
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P51918; 093387;
01-0CT-1996 (Rel. 34, Created)
10-0CT-2000 (Rel. 39, Last sequence update)
10-0CT-2003 (Rel. 42, Last annotation update)
Progonadoliberin I precursor [Contains: Gonadoliberin I (Luteinizing hormone I) (Gonadotropin-releasing hormone I) (Gonadotropin-releasing hormone I) (Gonadotropin-releasing hormone I) (Gonadotropin-releasing hormone I)
                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
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Actinopterygii; Neopterygii; Teleostei; Buteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Labroidei;
Ciollidae; Astarotilapia:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDINE-95396797; PubMed=7667296; White S.A., Kasten T.L., Bond C.T., Adelman J.P., Fernald R.D.; White S.A., Kasten T.L., Bond C.T., Adelman J.P., Fernald R.D.; "Three gonadotropin-releasing hormone genes in one organism suggest
                                                                                                                                  GNRH-ASSOCIATED PEPTIDE I.
APPEARS TO BE ESSENTIAL FOR BIOLOGICAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -!- SUBCELLUTA LOCATION: Secreted.
-!- TISSUB SPECIFICITY: SYNTHESIZED IN PREOPTIC NEURONS AND IS
TRANSPORTED TO THE PITUITARY IN THE PREOPTIC-HYPOPHYSEAL AXONS.
-!- MASS SPECIFOMETRY: MM=1113.9; NETHOD=MALDI; RANGE=23-32.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE-99061842; PubMed-9843638; White R.B., Fernald R.D.; "Ontogeny of gonadotropin-releasing hormone (GnRH) gene exprinchedeny of gonadotropin-releasing hormone adjectives in the
                                                                                                                                                                                                                   PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                                                                                                                                          Score 42; DB 1; Length 92;
Pred. No. 7.4;
2; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                         4FDBF2C58CF5F63B CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           novel roles for an ancient peptide.";
Proc. Natl. Acad. Sci. U.S.A. 92:8363-8367(1995)
                                                                              PROGONADOLIBERIN I. GONADOLIBERIN I.
  Cleavage on pair of basic residues; Hormone; Ar
Placenta; Signal; Pyrrolidone carboxylic acid.
SIGNAL 1 23 BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Haplochromis burtoni (Burton's mouthbrooder)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  midbrain.";
Gen. Comp. Endocrinol. 112:322-329(1998).
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                                                                                                                                                                                                                                                                                                     SIMILARITY)
                                                                                                                                                                                                                                                SIMILARITY
                                                                                                                                                                                                                                                                                                                            10197 MW;
                                                                                                                                                                                                                                                                                                                                                                             57.5%;
                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 60.0%,
G; Conservative
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                                                                                                                                                                                                                                                                                                                               92 AA;
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PEPTIDE
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ACT SITE
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GON1_HAPBU
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23 OHWSYGLSPG
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Matches 6; Conser
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NCBI TaxID=143350;
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                                                                                                                                                                                                                                                                95 AA;
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36
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P70074;
                                                                                                                                                                                    PEPTIDE
PEPTIDE
MOD_RES
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                                                                                                                                                                                                                                       MOD_RES
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GON1_PAGMA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GNRH1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDIINE=99061809; PubMed=9845669; Chow M.M., Kight K.E., Gothilf Y., Alok D., Stubblefield J., Zohar Y.; Chow M.M., Kight K.E., Gothilf Y., Alok D., Stubblefield J., Zohar Y.; multiple GnRHs present in a teleost species are encoded by separate genes: analysis of the sbGnRH and cGnRH-II genes from the striped bass, Morone saxatilis.";
                                                                                                                        EMBL; U31865; AAC59691.1; -.

EMBL; AF076961; AAC27716.1; -.

PIK; 150739, 150739

GO; GO:0005576; C:extracellular; NAS.

GO; GO:0005775; P:luteinizing hormone-releasing factor activity; NAS.

GO; GO:000775; P:luteinizing hormone-releasing factor activity; NAS.

InterPro; IPR002012; GNRH.

InterPro; IPR004079; GnadoliberinI.

PRINTY, PRO141; GONDADLIBRNI.

PROSTE; PS06473; GNRH; 1.

Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus; Signal; Multigene family; Pyrrolidone carboxylic acid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gonadoliberin I precursor (Gonadotropin-releasing hormone I) (GnRH-I) (LH-RH I) (Luliberin I).
                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Percoidei;
                                                                                                                                                                                                                                                                                                                                                      AMIDATION (G-33 PROVIDE AMIDE GROUP).
ENGHRIFKK -> KMDTGHSRNERFL (IN REF. 1).
                                                                                                                                                                                                                                                                                                                GONADOLIBERIN I.
GNRH-ASSOCIATED PEPTIDE I (POTENTIAL)
PYRROLIDONE CARBOXYLIC ACID.
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-!- FUNCTION: Stimulates the secretion of gonadotropins (By
                                                                                                                                                                                                                                                                                                                                                                                                      Score 42; DB 1; Length 94; Pred. No. 7.6;
                                                                                                                                                                                                                                                                                                                                                                                                                                2; Indels
                                                                                                                                                                                                                                                                                                                                                                               E57DBA83333278D7 CRC64;
                                                                                                                                                                                                                                                                                                     PROGONADOLIBERIN I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            similaritty).
SUBCELLUTAR LOCATION: Secreted.
SIMILARITY: Belongs to the GnRH family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               95 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                  2; Mismatches
  SIMILARITY: Belongs to the GnRH family
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Morone saxatilis (Striped bass).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      [6-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 40, Last seq.
28-FBB-2003 (Rel. 41, Last ann
                                                                                                                                                                                                                                                                                                                                                                                10382 MW;
                                                                                                                                                                                                                                                                                                                                                                                                        57.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Moronidae, Morone.
NCBI_TaxID=34816;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                94 AA;
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073812;
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MOD RES
CONFLICT
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PEPTIDE
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use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@18b-sib.ch).
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PROSITE; PRO1541; GONRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus;
                                                                                                                               EMBL, AF056314; AAD03817.1; -.
InterPro; IFR004079; GnRH.
InterPro; IFR004079; GanadoliberinI.
Pfam; PF00446; GnRH; 1.
PROSITE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus; Signal; Multigene family; Pyrrolidone carboxylic acid.
Signal; Multigene family; Pyrrolidone carboxylic acid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15-JUL-1998 (Rel. 36, Created)
15-JUL-1998 (Rel. 36, Last sequence update)
28-FRB-2003 (Rel. 41, Last annotation update)
Gonadoliberin I precursor (Gonadotropin-releasing hormone I) (GnRH-I)
(LH-RH I) (Luliberin I).
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Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Percoidei;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                       PROGONADOLIBERIN I.
GONADOLIBERIN I.
GNRH-ASSOCIATED PEPTIDE I (POTENTIAL)
PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (G-33 PROVIDE AMIDE GROUP)
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Pred. No. 7.7;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (BY SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SIMILARITY)
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InterPro; IPR002012; GRRH.
InterPro; IPR004079; GonadoliberinI.
Pfam; PF00446; GRRH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10411 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  57.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6; Conservative
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        Signal;
        Multigene family;
        Pyrrolidone carboxylic acid.

        SIGNAL
        1
        23
        POTENTAL.

        CHAIN
        24
        33
        GONADOLIBERIN I.

        PEPTIDE
        24
        33
        GONADOLIBERIN I.

        PEPTIDE
        24
        33
        GONADOLIBERIN I.

        MOD_RES
        24
        24
        PYRROLIDONE CARBOXYLIC ACID (BY SIMILARITY).

        MOD_RES
        33
        AMIDATITY).
        AMIDARITY).

        SEQUENCE
        95 AA;
        10566 MW;
        61E79C990328D73E CRC64;

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24 QHWSYGLSPG 33
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Search completed: March 2, 2004, 19:26:15 Job time : 22 secs

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Q90zel oncorhynchu Q7tlll odontesthes Q92094 oncorhynchu Q90v3 oncorhynchu	Qyw/gr oucothynchu Q9i8p9 oncorhynchu Q9i8q0 oncorhynchu	Ogpsy9 sparus aura Qguw82 verasper mo Qawf6 oreochromis	Q7ZTUU Oreochromis Q9ddd8 brachydanio Q9deh5 carasius a	Obduke scieropages Obdeh6 carassius a	Q8jhc3 cyprinus ca Q804c1 cyprinus ca	Q801d5 cyprinus ca O9bbx7 homo sapien	Q8jh60 alosa sapid Q27385 methanobact	O27690 methanobact Q15885 homo sapien	Q911892 nomo sapren Q8t8d2 octopus vul O8x5d0 escherichia	Q8xeg4 escherichia Q8x5a7 escherichia	Q93jn5 rhizobium l Q9xdj6 bacteroides	Oggar, phocornapou Q7usd7 rhodopirell Q86d90 ciona intes	Q86d89 ciona intes O69212 actinosynne	Q8ram1 thermoanaer O8dhq4 synechococc	08yz85 anabaena sp P74527 synechocyst	Q8y3u7 listeria mo Q8jif3 dentex dent	Q8jif2 pagrus majo Q8jif4 acanthopagr	Qyyıze sparus aura Q9prhO anguilla ja O8ifv3 oreochromis	Q80w80 verasper mo Q805a5 oreochromis	Ovevez mechineco	Osyle7 brucella me	Osrzg/ brucella su O97v92 sulfolobus	Q/xwry oryza saciv Q/xdu9 oryza sativ	Q9k738 bacillus na Q81py8 bacillus an	Q7u8h4 synechococc O8vmc7 anabaena sp	Q96sa2 homo sapien Ognd12 homo sapien	Q8fif6 escherichia	097550 clostridium	O06185 mycobacteri Q7ty71 mycobacteri	O89251 hepatitis g	694 nomo sapi 9m41 bradyrhi
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5.1.6 Compugen Ltd.		Search time 36 Seconds (without alignments) 87.644 Million cell updates/se					1017041												No. is the number of results predicted by chance to have a greater than or equal to the score of the result being printed,	re distribution.		Description	O7#115 odontesthes	Q9ttv0 trichosurus O8ww81 verasper mo	Ogpt25 oncorhynchu	Qypwby cypnionecce Q8qfu8 brachydanio	QBawie cyprinus ca	Q8jhfl brachydanio Q7zt17 cyprinus ca	anguilla j acaca mula	097655 macaca mula 09w7g0 oncorhynchu	

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309 310 311 312 314	316 317 318	3210 3210 3210	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	3 3 3 1 3 3 3 1 3 3 3 1	357 357 358	320	331	333	334 334	336	338 338	339	341	344	344 345	346 347		350 351	352) (L) (1 W C	358	329 360	362	363	364 365	366	900	369 370	371	373	375	376	378	379 380
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Q9ias7 xenopus lae Q9ias8 xenopus lae Q9ias8 senopus lae Q9yzf3 anabaena sp Q8yzf3 anabaena sp Q8yzf3 anabaena sp Q8yzf3 anabaena sp Q8yzf3 drosophila Q9yzf5 ambystoma m P7053 xenopus lae Q9435 fugu rubrip O57582 cynops pyrr Q8d189 synechococc Q8d410 vibrio vuln Q9yzf2 ambystoma m P73615 synechocyst P70011 xenopus lae Q9yzes mus musculu Q9is77 xenopus lae Q9yzes mus musculu Q9is73 bradyrhizob Q8df1 propionibac Q8df1 propionibac Q92541 propionibac Q42292 artyanax fa Q9yzes mus musculu Q9yzes pred ambystoma m Q8Bw38 pyrr Q8mq19 caenorhabdi Q9yzes geudomonas Q9yzes geudomonas Q9z541 streptomyce Q57584 cynops pyrr Q91202 streptomyce Q91561 pseudomonas Q90y2 lampera zeropromyce Q91561 pseudomonas Q90y2 sachorhabdi Q41677 hepatitis g	ALIGNMENTS RT; 62 AA. ated) t sequence update) t sequence update) I (Fragment). II (Fragment). raniata; Vertebrata; Euteleostomi; leostei; Euteleostei; Neoteleostei; Parcomorpha; Atherinomorpha; therinidae; Atherinopsinae; coza G.M.; codNA sequences in the pejerrey fish
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Q91927 hepatitis g Q91928 hepatitis g Q91928 hepatitis g Q91a01 hepatitis g Q91a01 hepatitis g Q91a01 hepatitis g Q91a06 hepatitis g Q96021 hepatitis g Q96027 tritchomon Q95051 tritrichomo Q95051 tritrichomo Q95051 tritrichomo Q95051 tritrichomo Q86052 tritrichomo Q86055 frankia sp. Q7wesb bordetella Q7wesb bordetella Q7wesb bordetella Q7wesb bordetella Q7wesb bordetella Q86055 preudomonas Q86071 vibrio chol O12574 oryzlas sp. Q86074 oryzmebacte Q86074 oryzmebacte Q86090 preudomonas Q86090 preudomonas Q86090 mus musculu Q8730 triturus al Q8730 triturus al Q8730 triturus al Q8730 triturus al Q8980 mus musculu Q9907 rhodococuus Q90407 mus musculu Q90407 mus musculu Q90407 mus musculu Q90407 mus musculu Q90404 hepatitis g Q90904 hepatitis g	99990 hepatitis g 99900 hepatitis g 999000000000000000000000000000000000
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GONADOTROPIN-RELEASING HORMONE ASSOCIATED
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-UNA-2003 (TrEMBLrel. 24, Last annotation update)
01-UN-2003 (TrEMBLrel. 24, Last annotation update)
Chicken-II type gonadotropin-releasing hormone (Gonadoliberin) (GnRH)
(LH-RH) (Luliberin).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       won schalburg K.R., Harrower W.L., Sherwood N.M.;

"Regulation and expression of GnRH in salmon embryo and gonad.";

"Regulation and expression of GnRH in salmon embryo and gonad.";

"Regulation and expression of GnRH in salmon embryo and gonad.";

"In Mol. Cell. Endocrinol. 157:41-54(1999).

"In Endocrinol. STIMULATES THE SECRETION OF GONADOTROPINS (BY SIMILARITY).

"IN EMBL. AFIZSATS, APROBES TO THE GNRH FAMILY.

"EMBL. AFIZSATS, PROBES 11, T.R.

"REMEL, AFIZSATS, PROBES 11, T.R.

"AC) GO:0005576; C:extracellular; IEA.

"RO) GO:0005776; P:hormone activity; IEA.

"RO) GO:0005776; P:development; IEA.

"REMEL, FRO0466; GARH; 1.
                                                                                                                                                                                                                                                                                                                                                                                     CHICKEN-II-TYPE GONADOTROPIN-RELEASING HORMONE.
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Bukaryota, Metazca, Chordata, Craniata, Vertebrata; Euteleostomi;
Actinopterygii, Neopterygii, Teleostei; Buteleostei;
Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
   flounder.";
Submitted (JUL-2001) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: STIMULATES THE SECRETION OF GONADOTROPINS (BY
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Pred. No. 0.0059;
1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 70; DB 13; Length 85; Pred. No. 0.0058; 1; Mismatches 0; Indels
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                                                               -!- FUNCLIAN.
-!- SIMILARITY: BELONGS TO THE GNRH FAMILY.
-!- SIMILARITY: BELONGS TO THE GNRH FAMILY.
EMBL; AB066359; BAB83983.1; -.
GO; GO:0005179; Fibormone activity; IEA.
GO; GO:0005179; Fibormone activity; IEA.
GO; GO:0007275; Pidevelopment; IEA.
InterPro; IPR002012; GnRH.
R PROSITE: PS00473; GNRH; 1.
M Amidation; Hormone; Signal.
T SIGNAL 1 23 CHICKEN-II-TYPE
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MEDLINE=20084414; PubMed=10619396;
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Local Similarity 90.0%;
les 9; Conservative
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Best Local Similarity 90...
Pest Local 9, Conservative
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01-MAY-2000 (TYEMBLrel. 13, Last sequence update)
01-MAY-2000 (TYEMBLrel. 24, Last annotation update)
17-MAY-2003 (TYEMBLREL. 24, Last annotation)
17-MAY-2003 (MAY-2004)
17-MAY-2004 (MAY-2004)
18-MAY-2004 (MAY-2004)
18-M
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Lawrence S.B., McNatty K.P., Fidler A.E., "CDNA Sequence of the chicken type II gonadotrophin releasing hormone (CII GnRH) gene of the brushtail possum (Trichosurus vulpecula).", submitted (OCT-1999) to the EMBL/GenBank/DDBJ databases.
-i- FUNCTION: STIMULATES THE SECRETION OF GONADOTROPINS (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
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01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
01-MAR-2003 (TrEMBLrel. 24, Last amnotation update)
01-UN-2003 (TrEMBLrel. 24, Last amnotation update)
Chicken-II type gonadotropin-releasing hormone precursor
(Gonadoliberin) (GnRH) (LH-RH) (Luliberin).
Verasper moseri (Barfin flounder).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Meopterygii; Teleostei; Buteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Pleuronectiformes;
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                                                                                                               Query Match 95.9%; Score 70; DB 13; Length 62; Best Local Similarity 90.0%; Pred. No. 0.0042; Matches 9; Conservative 1; Mismatches 0; Indels
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Pred. No. 0.0051;
1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Amidation, Hormone.
SEQUENCE 75 AA, 8381 MW, 1C0E324492CA4283 CRC64;
                                                            62 AA; 7259 MW; 0D24C3AA0E94083F CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              85 AA,
                                                                                                                                                                                                                                                                                                                                                                                                                                     75 A.A.
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GO; GO: 0005276; C:extracellular; IEA.
GO; GO: 0005276; F:hormone activity; IEA.
GO; GO: 0007275; P:development; IEA.
InterPro; IRR020215; GRH;
PFEM; PF00446; GRH; 1.
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NCBI_TaxID=98923;
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EMBL; AY316690; AAP84604.1; -...
NON TER 1 1
SEQUENCE 62 AA; 7259 MW; OI
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Best Local Similarity 90...
9, Conservative
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RESULT 3
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PROSITE; PS00473; GNRH; 1.
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Matches
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"Characterization of gonadotropin releasing hormone (GnRH) expression in the juvenile zebrafish Danio reito.";
Submitted (Apr. 2002) to the EMEL/GenBank/DDBU databases.
                                                                                                                                                                                                                                                                                                                                         Ebersole T.J., Goetz F.W., Boyd S.K.;
"Cloning of chicken II (cII) GnRH cDNA from the brain of a caecilian amphibian, Typhlonectes natans.";
Submitted (JUL-1999) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: STIMULATES THE SECRETION OF GONADOTROPINS (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Brachydanio rerio (Zebrafish) (Danio rerio).
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Actinopterygii, Neopterygii; Teleostei, Ostariophysi; Cypriniformes,
Cyprinidae, Danio.
                                                                                  01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-UTN-2003 (TrEMBLrel. 24, Last annotation update)
Gonadotropin-releasing hormone II precursor (Gonadoliberin) (GnEH)
                                                                                                                                                                                                               Būkaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi, Amphibia; Gymnophiona, Caeciliidae, Typhlonectes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
ClI gonadotropin releasing hormone (Gonadoliberin) (GnRH) (LH-RH)
(Luliberin)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           POTENTIAL.
GONADOTROPIN-RELEASING HORMONE II.
2A02299F73B3720A CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              95.9%; Score 70; DB 13; Length 86; 90.0%; Pred. No. 0.0059;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -!- SIMILARITY: BELONGS TO THE GNRH FAMILY.
EMBL; AF167558; AAA48032.1; -.
GO; GO:0005576; C:extracellular.
GO; GO:000579; F:hormone activity; IEA.
GO; GO:0007275; F:hormone activity; IEA.
INTERPO. IRRO20012; GNRH.
PROSITE; PS00446; GNRH; 1.
PROSITE; PS00473; GNRH; 1.
Amidation; HOrmone; Signal.
SIGNAL
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                                              86 AA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL; AY094357; AAM15717.1; -. GO; GO:0005576; C:extracellular; IEA. GO; GO:0005179; F:hormone activity; IEA. GO; GO:0007275; P:development; IEA. InterPro; IPR002012; GRH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-JUN-2002 (TrEMBLrel. 21, Created)
                                                                                                                                                                     (LH-RH) (Iuliberin).
Typhlonectes natans (Rubber eel)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       86 AA; 9788 MW;
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                                           PRELIMINARY;
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                                                                                                                                                                                                                                                      NCBI_TaxID=8456;
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                                                                                                                                                                                                                                                                                                                             TISSUE=Brain;
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QBQFUB;
                                                                     Q9PW69
                                              69MG60
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RESULT 5
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TISSUE=Brain;

MEDLINE=21560666;

Okubo K., Aida K.;

"Gonadotropin-releasing hormones (GnRHs) in a primitive teleost, the arowans: phylogenetic evidence that three paralogous lineages of GnRH occurred prior to the emergence of teleosts.";

Gen. Comp. Endocrinol. 124:125-133(2001).

-i- FUNCTION: STIMULATES THE SECRETION OF GONADOTROPINS (BY
                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-MAR-2003 (TrEMBirel. 23, Created)
01-MAR-2003 (TrEMBirel. 23, Last sequence update)
01-OCT-2003 (TrEMBirel. 25, Last annotation update)
Chicken.IT-type gonadotropin-releasing hormone precursor.
Cyprinus carpio (Common carp).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
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CHICKEN-II-TYPE GONADOTROPIN-RELEASING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Scleropages jardinii (Australian bonytongue).
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Actinopterygii, Neopterygii, Teleostei, Geteoglossomorpha,
Osteoglossiformes, Osteoglossidae, Scleropages.
                                                                                                                                                                                                                                                                                                                                                                                     QBUUK5;
01-MAR-2002 (TrEMBLrel. 20, Created)
01-MNR-2002 (TrEMBLrel. 20, Last sequence update)
01-UN-2003 (TrEMBLrel. 24, Last annotation update)
Prepro-chicken-II-type gonadotropin-releasing hormone precursor
(Gonadoliberin) (GRR) (LH-RH) (Luliberin).
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0
                                                                    Score 70; DB 13; Length 86;
Pred. No. 0.0059;
1; Mismatches 0; Indels
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Pred. No. 0.0059;
1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  F7A4643016307D05 CRC64;
                           27F5A5CCDC4026D8 CRC64;
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-1- SIMILARITY: BELONGS TO THE GNRH FAMILY.
EMBL, ABO47326; BAB72183.1; --
GO, GO:0005576; C:extracellular; IEA.
GO, GO:0005179; F:hormone activity; IEA.
GO; GO:0007275; P:development; IEA.
InterPro; IPR002012; GRBH.
                                                                                                                                                                                                                                                                                                                                                             PRT;
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Amidation; Hormone.
SEQUENCE 86 AA; 9802 MW;
                                                                       Query Match
Best Local Similarity 90.0%;
Matches 9; Conservative
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Pfam; PF00446; GNRH; 1.
PROSITE; PS00473; GNRH; 1.
Amidation; Hormone; 31gmal.
24
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Okubo K., Suetake H., Aida K.;

"Expression of two gonadotropin-releasing hormone (GnRH) precursor genes in various tissues of the Japanese eel and evolution of GnRH.";

Zool. Sci. 16:471-478 (1999).
                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A. Li,S.F., Zhu Z.Y.; Li,S.F., Hu W., Wang Y.P., Zhu Z.Y.; "Isolation and identification of two differing sGnRH from common carp "Isolation and identification of two differing sGnRH from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-UNA-2003 (TrEMBLrel. 24, Last annotation update)
prepro-cGRH-II precursor (Gonadoliberin) (Gonadotropin-releasing
hormone) (LH-RH) (Luliberin).
Anguilla japonica (Japanese eel).
Bukaaryota; Metazoa, Chordata; Craniata; Vertebrata; Euteleostomi;
Anguilla,
Anguilla.
                                                                                                                                            Cyprinus carpio (Common carp).

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostarlophysi; Cypriniformes;
Cyprinidae; Cyprinus.
NCBI_TaxID=7962;
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                                                                                                                                                                                                                                                                                                                                                                                          JULY S. H. W., MANGY Y.P., Zhu Z.Y.;
"Gene clone and promoter functional analysis of cGnRH-II.";
"Gene clone and promoter functional analysis of cGnRH-II.";
Submitted (FEED-2003) to the EMBL/GenBank/DDBJ databases.
BMBL; AX189961; AA039753.1; --
BMBL; AX189961; AA039753.1; --
GO; GO:0005776; C:extracellular; IEA.
GO; GO:000179; F:hormone activity; IEA.
GO; GO:000775; P:development; IEA.
InterPro; IPR002012; GRRH;
PR0046; GRRH; 1.
PRO046; GNRH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 70; DB 13; Length 86;
Pred. No. 0.0059;
1; Mismatches 0; Indels
                                                                    01-JUN-2003 (TrEMBLrel. 24, Created)
01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
01-JUN-2003 (TrEMBLrel. 25, Last annotation update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Chicken-II-type gonadotropin-releasing hormone precursor.
                                                                                                                                                                                                                                                                                                                            (Cyprinus carpio).";
Submitted (DEC-2002) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HORMONE ASSOCIATED PEPTIDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6F19886E2B85DB61 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           87 AA
                                   86 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           POTENTIAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
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ilarity 90.0%;
Conservative
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                                   PRELIMINARY;
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34
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nes 9; Conserv
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SEQUENCE FROM N.A.
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                                     Q7ZT17
Q7ZT17;
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Q9PRI3
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RESULT 10
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Steven C., Ijiri S., Zohar Y.;
Characterization of the gonadotropin-releasing hormone system in the "Characterization of the gonadotropin-releasing hormone system in the submitted (MAY-2002).";
Submitted (MAY-2002) to the EMBL/GenBank/DDBJ databases.
EMBL, AF511531; AAM43951.1; -.
EMBL, AF511531; AAM43951.1; -.
GO; GO:0005576; C:extracellular; IEA.
GO; GO:0005179; F:hormone activity; IEA.
GO; GO:0007275; P:development; IEA.
Interpro; IRRO02012; GRH.
                                              SECUENCE FROM N.A.

Li S.F., Hu W., Wang Y.P., Zhu Z.Y.;

Li S.F., Hu W., Wang Y.P., Zhu Z.Y.;

"Genelics, cloning and promoter function analysis of the GnRH gene.";

Submitted (DEC-2002) to the BMBL/GenBank/DDBJ databases.

EMBL; AX147400; AAN64351.3; -BMBL; GO: GO:00055179; Fibornone activity; IEA.

GO: GO:0007775; Priormone activity; IEA.

GO: GO:0007775; Priormone activity; IEA.

InterPro; IPR002012; GnRH.

PROSITE; PS00445; GnRH; 1.
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01-0CT-2002 (TrEMBLrel. 22, Last sequence update)
01-0CT-2003 (TrEMBLrel. 24, Last amoutation update)
01-UDN-2003 (TrEMBLrel. 24, Last amoutation update)
Gonadotropin-releasing hormone type-II precursor.
Brachydanio rerio (Zebrafish) (Danio rerio).
Bukaryotai, Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Actinopterygii, Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
Cyprinidae; Danio.
NCBI_TaxID=7955;
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GONADCTROPIN-RELEASING HORMONE TYPE-II.
GONADCTROPIN-RELEASING HORMONE TYPE-II
                                                                                                                                                                                                                                                                                       CHICKENIALI.
CHICKENII-TYPE GONADOTROPIN-RELEASING HORMONE.
CGNRH-II ASSOCIATED PEPTIDE.
AA34E0B17AD1DA55 CRC64;
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Pred. No. 0.0059;
1; Mismatches 0; Indels
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9DA1B3ACBCEC86A4 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                         95.9%;
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                                                                                                                                                                                                                                                                                                                                                     86 AA; 9959 MW;
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PROSITE; PS00473; GNRH; 1.
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Matches 9; Conservative
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86
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     Cyprinidae, Cyprinus.
NCBI_TaxID=7962;
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Q9W7G0;
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Matches
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                                                                                                        RESULT 13
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Okubo K., Suetake H., Aida K.;

"A splicing variant for the prepro-mammalian gonadotropin-releasing hormone (prepro-mGRH) mRNA is present in the brain and various hormone (prepro-mGRH) mRNA is present in the brain and various peripheral tissues of the Japanese eel.";

"In Zool. Sci. 16:645-651(1999).

"In Zool. Sci. 16:645-651(1999).

"In INTATION: STIMULARIES THE SECRETION OF GONADOTROPINS (BY SIMILARITY).

"SIMILARITY." SELONGS TO THE GNRH FAMILY.

"EMBL; AB026990; BAA83598.1; -

"EMBL; AB026992; BAA83598.1; -

"R GO; GO:0005179; F:hormone activity; IEA.

"R GO; GO:0005179; F:hormone activity; IEA.

"R GO; GO:0005179; F:hormone activity; IEA.

"R GO; GO:0005179; GNRH.

"R PFGM; PF00446; GARH.

"R PFGM; PF00446; GARH.

"R PROSITE; PS00473; GNRH.
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-!- FUNCTION: STIMULATES THE SECRETION OF GONADOTROPINS (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
Cercopithecinae; Macaca.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-VIN-2003 (TrEMBLrel. 24, Last annotation update)
Chicken luteinizing hormone-releasing hormone II (Gonadoliberin)
(Gonadotropin-releasing hormone) (GnRH) (LH-RH) (Luliberin)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 70; DB 13; Length 87;
Pred. No. 0.0059;
1; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGNRH-II.
GNRH ASSOCIATED PEPTIDE.
6B24DE452338B48A CRC64;
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Best Local Similarity yv..
9; Conservative
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nes 9, Conservative
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1 EHWSHGWYPG 10

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OHWSHGWYPG 34

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Mite R.B., Urbanski H.F., Fernald R.D.;

White R.B., Urbanski H.F., Fernald R.D.;

White R.B., Urbanski H.F., Fernald R.D.;

White R.B., Urbanski H.F., Fernald R.D.;

"A second gene for gonadorrogin.releasing hormone is expressed in the rheus macaque (Abstract #632-18.";

"A bstr. — Soc. Neurosci. 24:1609-1609(1998).

"I Abstr. — Soc. Neurosci. 24:1609-1609(1998).

"I SIMILARITY: BELONGS TO THE GNRH FAMILY.

"E EMBL, AF097356; AAD09106.1; -..

"GO; GO:0005776; P:hormone activity; IEA.

"GO; GO:0002775; P:hormone activity; IEA.

"RO; GO:0007275; P:hormone activity; IEA.

"RO; GO:0007275; P:hormone activity; IEA.

"RO; GO:0007275; P:development; IEA.

"RO; GO:0007275; GRRH; I.
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Von Schalburg K.R., Sherwood N.M.;
"Regulation and expression of gonadotropin-releasing hormone gene differs in brain and gonads in rainbow trout.";
Endocrinology 140:3012-3024(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Oncorhynchus mykiss (Rainbow trout) (Salmo gairdneri).
Eukaryota, Metazca; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii, Neopterygii; Teleostei; Euteleostei;
Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
                                                                                                                                                        Macaca mulatta. (Rhesus macaque).
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
Mammalia, Butheria, Primates; Catarrhini, Cercopithecidae;
Cercopithecinae; Macaca.
                 097655,
01-MAY-1999 (TrEMBLrel. 10, Created)
01-MAY-1999 (TrEMBLrel. 10, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
Gonadotropin-releasing hormone II (Gonadoliberin) (GnRH) (LH-RH)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-NOV-1999 (TrEMBLrel. 12, Created)
01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
01-NOV-1999 (TrEMBLrel. 24, Last annotation update)
Gonadotropin-releasing hormone (Gonadoliberin) (GnRH) (LH-RH)
GNRH2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A. Sherwood N.M.; on Schalburg K.R., Sherwood N.M.; Submitted 'iDE--1998) to the EMBL/GenBank/DDBU databases. -!- FUNCTION: STIMULATES THE SECRETION OF GONADOTROPINS (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       95.9%; Score 70; DB 6; Length 114; 90.0%; Pred. No. 0.0078; Live 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             114 AA; 12533 MW; 8B70D690D5BD5103 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    33 AA.
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PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ilarity 90.0%;
Conservative
  PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 EHWSHGWYPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25 OHWSHGWYPG 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Amidation; Hormone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
les 9; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
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TISSUE=Testis;
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                               60M060
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       60W060
                               SOW WHEN THE PROPERTY OF THE P
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Eukaryota; Metacoa; Chordata; Craniata; Verfebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei;
Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE=99312119; PubMed=10385393;
Von Schalburg K.R., Sherwood N.M.;
Vegulation and expression of gonadotropin-releasing hormone gene differs in brain and gonads in rainbow trout.";
Endocrinology 140:3012-3024(1999).
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-UNY-2003 (TrEMBLrel. 24, Last annotation update)
60-JUN-2003 (TrEMBLrel. 24, Last annotation update)
60-JUN-2003 (Treasing hormone (Gonadoliberin) (GnRH) (LH-RH)
(Luliberin) (Fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.

On Schalburg K.R., Sherwood N.W.;
Submitted (DEC-1998) to the EMBL/GenBank/DDBJ databases.

-- FUNCTION: STIMULATES THE SECRETION OF GONADOTROPINS (BY
                                                                                                                                                                                                                                                                         76.7%; Score 56; DB 13; Length 33; 70.0%; Pred. No. 0.23; tive 2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 56; DB 13; Length 33;
Pred. No. 0.23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1; Indels
                                                                                                                                                                                                         33 AA; 3668 MW; 099C825E4A72A3BB CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         33 33 33 34A; IFE1535E742B7EBB CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -!- SIMILARITY: BELONGS TO THE GNRH FAMILY.
EMBL, AFILIOS31 AAD4346.1.1.
GO, GO:0005576; C:extracellular, IBA.
GO; GO:0005179; F:hormone activity; IEA.
GO; GO:0007179; F:hormone activity; IEA.
INCERPO: JPR002047; AKH.
INCERPO: IPR002012; GNRH.
PROSITE; PS00456; AKH; 1.
PROSITE; PS00473; GNRH; 1.
-!- SIMILARITY: BELONGS TO THE GNRH FAMILY.
EMBL, AF110993, AAD43463.1, -.
GO; GO: 0005576; C:extracellular; IEA.
GO; GO: 0005179; F:hormone activity; IEA.
GO; GO: 0007275; P:development; IEA.
INTERPRO; IPR02012; GRRH.
PROSITE; PE00463; GRRH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2; Mismatches
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70.0%;
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24 QHWSYGWLPG 33
                                                                                                                                                                                                                                                                                                                                                                    1 EHWSHGWYPG 10
                                                                                                                                                                                                                                                                                                                                                                                               1 EHWSHGWYPG 10
                                                                                                                                                                                   Amidation; Hormone.
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SEQUENCE
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Q9PT34;
                                                                                                                                                                                                                                                                                                                       Matches
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RESULT 16

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090009;
01-DEC-20001 (TERMELTE1. 19, Created)
01-DEC-2001 (TERMELTE1. 19, Last annotation update)
01-DEC-2001 (TERMELTE1. 24, Last annotation update)
01-DIN-2003 (TERMELTE1. 24, December 1)
01-DIN-2003 (TERMELTE1. 24, December 2)
01-DIN-2003 (TERMETE1. 24, DECEMBER 2)
01-DIN-2003 (TE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    T. "Stage-dependent and alternative splicing of sGnRH messenger's in rainbow trout testis during spermatogenesis.";

MOIL Reprod. Dev. 59:1-10(2001).

MOIL Reprod. Dev. 59:1-10(2001).

C. -!- FUNCTION: STIMULATES THE SECRETION OF GONADOTROPINS (BY SIMILARITY).

C. -!- SIMILARITY: BELONGS TO THE GNRH FAMILY.

R. EMBL, AF269107, AAK54679.1;

R. GO; GO:000576; C:extracellular; IEA.

R. GO; GO:0005775; P:development; IEA.

R. GO; GO:0007275; P:development; IEA.

R. InterProj. IPRO02413; GNRH; 1.
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01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-DEC-2001 (TrEMBLrel. 24, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
10-JUN-2003 (TrEMBLrel.) (Fragment).
10-JUN-2004 (Marchala, Cramiata, Vertebraca, Euteleostomi;
10-JUN-2004 (Marchala, Cramiata, Vertebraca, Euteleostomi;
10-JUN-2004 (Marchala, Cramiata, Vertebraca, Euteleostomi;
10-JUN-2004 (Marchala).
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Uzbekova S., Ferriure F., Guiguen Y., Bailhache T., Breton B.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 56; DB 13; Length 54; Pred. No. 0.37; 2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              06BF365F658E08B7 CRC64;
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70.08;
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24 QHWSYGWLPG 33
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
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01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-UTN-2003 (TrEMBLrel. 24, Last annotation update)
Gonadotropin-releasing hormone precursor II isoform B2 (Gonadotropin-releasing hormone precursor II isoform A) (Gonadotropin-releasing hormone precursor II isoform A) (Gonadotropin-releasing hormone precursor II isoform B1) (Gonadotiopin-releasing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Oncorhynchus mykiss (Rainbow trout) (Salmo gairdneri).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Actinopterygii, Neopterygii, Teleostei, Euteleostei,
Protacanthopterygii, Salmoniformes, Salmonidae, Oncorhynchus.
"Two different precursor genes for the salmon-type gonadotropin-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Uzbekova S., Ferriure F., Guiguen Y., Bailhache T., Breton B., Lareyre J.J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Stage-dependent and alternative splicing of sGnRH messengers rainbow trout testis during spermatogenesis."; Mol. Reprod. Dev. 59:11-10 (2001).

FUNCTION: STIMULATES THE SECRETION OF GONADOTROPINS (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 56; DB 13; Length 82;
Pred. No. 0.56;
2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                      Score 56; DB 13; Length 82;
Pred. No. 0.56;
2; Mismatches 1; Indels
              releasing hormone exist in salmonids.",
J. Mol. Endocrinol, 15:1-9(1995).
-!- FUNCTION: STIMULATES THE SECRETION OF GONADOTROPINS
                                                                                                                                                                                                                                                                                                         GNRH-ASSOCIATED PEPTIDE.
C64044EA521B2B8B CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        82 AA
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                                                                  SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL, AF269105, AAK54677.1; -.
EMBL, AF269103, AAK54675.1; -.
EMBL, AF269104, AAK54676.1; -.
EMBL, AF269104, C.extracellular, IEA.
GO, GO:0005576; C.extracellular, IEA.
GO; GO:0007179; F.hormone activity; IEA.
GO; GO:0007275; P:development; IEA.
                                                                                                  EMBL; D31868; BAA06666.1; -. GO; GO:0005576; C:extracellular; IEA. GO; GO:0005179; F:hormone activity; IEA. GO; GO:007275; P:development; IEA. InterPro; IPR002047; AKH.
                                                                                                                                                                                                                                                                          POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE=21232987; PubMed=11335940;
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                                                                                                                                                                                                                                                                                                                                                                              Local Similarity 70.0%;
ses 7; Conservative
                                                                                                                                                                                                                                                                                                                                                               76.7%;
                                                                                                                                                                                                                                                                                                                              9126 MW;
                                                                                                                                                                                                      Pfam; PF00446; GRRH; 1.
PROSITE; PS00256; AKH; 1.
PROSITE; PS00473; GNRH; 1.
Amidation; Hormone; Signal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pfam, PF00446, GnRH, 1.
PROSITE, PS00473, GNRH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      InterPro; IPR002012; GRRH.
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                                                                                                                                                                                                                                                                                                                                                                                                                                    1 EHWSHGWYPG 10
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24 QHWSYGWLPG 33
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Best Local Similarity
Matches 7; Conserva
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                                                                                                                                                                                                                                                                                                                                82 AA;
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Matches
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"Characterization of three GnRH cDNA sequences in the pejerrey fish Odontesthes bonariensis.";
Submitted (JUN-2003) to the EMBL/GenBank/DDBJ databases.
EMBL; AY323198; AAP84608.1;
                                                                                                                                                                                                                                                                                                                                                             01-0CT-2003 (TrEMBLrel. 25, Created)
01-0CT-2003 (TrEMBLrel. 25, Last sequence update)
01-0CT-2003 (TrEMBLrel. 25, Last sequence update)
01-0CT-2003 (TrEMBLrel. 25, Last annotation update)
01-0CT-2003 (TrEMBLrel. 25, Last annotation update)
Gonadotropin-releasing hormone (Transment).
Odontesthes bonariensis.
Eukaryota; Metazoa; Ghordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpia, Acanthopterygii; Percomorpha, Atherinomorpha,
Atheriniformes; Atherinoidei; Atherinidae; Atherinopsinae;
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Usukaryota, Metazoa, Chordata; Craniata; Vertebrata; Euteleostomi; Actimopterygii, Neoperygii, Teleostei, Euteleostei, Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
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01-JUN-2003 (TTEMBLrel. 24, Last annotation update)
Gonadotropin-releasing hormone precursor (Gonadoliberin) (GnRH)
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MEDLINE=96020547; PubMed=8546809;
Ashihara M., Suzuki M., Kubokawa K., Yoshiura Y., Kobayashi M.,
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                                                                                                                                     Score 56; DB 13; Length 62;
Pred. No. 0.42;
                                                                                                       E388AAA57E96B8DC CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    68 AA; 7717 MW; FAA92A3AD5211AAA CRC64;
                                                                                                                                                                                                                                                                                                                                68 AA.
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62 62
62 AA; 7018 MW;
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                                                                                                                                       76.7%;
70.0%;
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Best Local Similarity 70...
7: Conservative
                  PROSITE; PS00256; AKH; 1. PROSITE; PS00473; GNRH; 1
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Matches 7; Conservative
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   Pfam; PF00446; GnRH; 1.
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QHWSYGWLPG 15
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                                                   Amidation; Hormone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID=219752;
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Urano A., Aida K.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
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PREPRO-GNRH-I.
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NON TER
SEQUENCE
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Q7T1L1;
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InterPro; IPR002047; AKH.
InterPro; IPR002012; GnRH.
Pfam; PF00446; GnRH; 1.
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PROSITE; PS00473; GNRH; 1.
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Best Local Similarity
Matches 7; Conserv
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es 7; Conserv
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01-OCT-2000 (TrEMBLrel. 15, Created)
01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
01-UTN-2003 (TrEMBLrel. 24, Last annotation update)
Pro-sGRRH-II (Gonadoliberin) (Gonadotropin-releasing hormone) (LH-RH)
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SEQUENCE FROM N.A.
MEDLINE=99312119; Pubmed=10385393;
Von Schalburg K.R., Sherwood N.M.;
Von Schalburg and expression of gonadotropin-releasing hormone gene differs in brain and gonads in rainbow trout.";
Endocrinology 140:3012-3024(1999).
                                                                                                                                                                                                                                                                                      Oncorhynchus mykiss (Rainbow trout) (Salmo gairdneri). Bukaryota; Metazoda; Chordata; Variabrata; Buteleostomi; Actinopterygii, Neoperrygii; Teleostei; Buteleostei; Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
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                                                                                                                                                                          71-NOV-1999 (TrEMBLrel. 12, Created)
01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
01-UTN-2003 (TrEMBLrel. 24, Last annotation update)
Gonadotropin-releasing hormone (Gonadoliberin) (GRRH) (LH-RH)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 56; DB 13; Length 82;
Pred. No. 0.56;
2; Mismatches 1; Indels
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SEQUENCE FROM N.A.
von Schalburg K.R., Sherwood N.M.;
Submitted (DEC-1998) to the EMBL/GenBank/DDBJ databases.
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                                                                                                                                             82 AA
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70.0%;
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24 QHWSYGWLPG 33
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24 QHWSYGWLPG 33
                 EHWSHGWYPG
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SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                   Luliberin).
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Q9W7G1
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Q918P9
ID Q918P
AC Q918P
DT 01-0C
DT 01-0C
DT 01-0C
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109W761
10 100W76
AC 09W76
DT 01-NO
DT 01-NO
DT 01-UU
DE (CUL)
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Last annotation update)
(Gonadotropin-releasing hormone) (LH-RH)
Oncorhynchus mykiss (Rainbow trout) (Salmo gairdneri).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei;
Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
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01-0CT-2000 (TrEMBLrel. 15, Last sequence update)
01-0CT-2000 (TrEMBLrel. 14, Last annotation update)
01-0TW-2003 (TrEMBLrel. 24, Last annotation update)
Pro-sGnRH-I (Gonadoliberin) (Gonadotropin-releasing hormone) (LH-R (Luliberin).
0ncorhynchus mykiss (Rainbow trout) (Salmo gairdneri).
Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Actinopterygii, Neopeerygii, Teleostei; Euteleostei;
Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
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Ferriere F., Bailhache T., Jego P.,;
"Oncorhynchus mykiss sGRH-II cDNA in the brain.";
Submitted (FES-2000) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: STIMULATES THE SECRETION OF GONADOTROPINS (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TISSUE=Brain;
Ferriere F., Bailhache T., Jego P.;
Forochynchus mykiss sGnRH-I cDNA from brain.";
Submitted (FEB-2000) to the EMBL/GenBank/DDBJ databases.
---- FUNCTION: STIMULATES THE SECRETION OF GONADOTROPINS (BY SIMILARITY).
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Pred. No. 0.56;
2; Mismatches 1; Indels
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Pred. No. 0.56,
2, Mismatches 1; Indels
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GO; GO: 0005576; C:extracellular; IEA.

GO; GO: 0005779; F:hormone activity; IEA.

GO; GO: 0007275; P:development; IEA.

InterPro; IRF002012; GRPH.

PEam; PF00446; GRPH; 1.

PROSITE; PS00473; GNRH; 1.
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EMBL, AP332212; AAF91280.1; -.
GO; GO:000576; C:extracellular; IEA.
GO; GO:0005179; F:hormone activity; IEA.
GO; GO:0007275; P:development; IEA.
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70.0%;
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Q7ZT00;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
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Verasper meseri (Barfin flounder).

Verasper meseri (Barfin flounder).

Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei; Acanthomoppha; Acanthoppha; Acanthoppha; Acanthopperygii; Percomorpha; Pleuronectiformes; Pleuronectoidei; Pleuronectoidei; Verasper.
                                                                                                                                                                                                                                                                                                           Būkaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Actinopterygii; Neopterygii; Teleostei; Buteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Percoidei;
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0
                                                                                                                                                                                01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUM-2003 (TrEMBLrel. 24, Last annotation update)
SGRH (Gonadoliberin) (Gonadotropin-releasing hormone) (LH-RH)
(Luliberin) (Fragment).
Sparus aurata (Gilthead sea bream)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Submitted (FEB-1998) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: STIMULATES THE SECRETION OF GONADOTROPINS (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               flounder...;
Submitted (JUL-2001) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: STIMULATES THE SECRETION OF GONADOTROPINS (BY SINILARITY).
-!- SIMILARITY).
-!- SIMILARITY).
EMBL, AB066358; BAD883982.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 56; DB 13; Length 88;
Pred. No. 0.6;
2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 88 AA; 9788 MW; F7EB868C2FBDF19F CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-MAR-2002 (TrEMBLrel. 20, Created)
01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           90 AA.
                                                                                                                                               88 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -! - SIMILARITY: BELONGS TO THE GNRH FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL, AF046799; AAD02425.1; -. GO; GO:0005576; C:extracellular; IEA. GO; GO:0005179; F:hormone activity; IEA. GO; GO:0007275; P:hormone activity; IEA. InterPro; IPR02012; GnRH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     76.7%;
70.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PROSITE; PS00473; GNRH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity 70.0
les 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRELIMINARY;
                                                                                                                                               PRELIMINARY;
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                        :|||:|| ||
QHWSYGWLPG 33
1 EHWSHGWYPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Amidation; Hormone.
                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                              Sparidae; Sparus
                                                                                                                                                                                                                                                                                                                                                                                                  NCBI TaxID=8175;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               TISSUE=Ovary;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nabissi M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Amano M.;
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080W88
AC 080W8
AC 080W8
DT 01-MA
DT 01-MA
DT 01-JU
DE Salmo
DE Salmo
DE Actin
OC Acant
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CO RESULAT
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                                                                                                                                                                                                                                               GONADOTROPIN-RELEASING HORMONE ASSOCIATED
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Oreochromis mossambicus (Mozambique tilapia) (Tilapia mossambica).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Actinopterygii, Neopterygii, Teleostei; Buteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Labroidei;
Cichlidae; Oreochromis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A. Molina A.I., Pellegrini E., Baihache T., Martial J.A., Muller M., "Cloning and brain expression analysis of the tilapia salmon type
                                                                                                                                                                         POTENTIAL.
SALMON-TYPE GONADOTROPIN-RELEASING
HORMONE.
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Pred. No. 0.61;
2; Mismatches 1; Indels
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Pred. No. 0.61;
2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          June 1. Submitted (OCT-2002) to the EMBL/GenBank/DDBJ databases. EMBL, AV167989; AAO11648 1; -. GO; GO:000576; C:extracellular; IEA. GO; GO:0005779; F:hormone activity; IEA. GO; GO:0007275; P:hormone activity; IEA. InterPro; IRRO@O12; GnRH; I. Fram: PF00446; GnRH; 1. PF00446; GnRH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     POTENTIAL.
B3637E3839A53A4E CRC64;
                                                                                                                                                                                                                                                                                             SBFD01586CEABC9D CRC64;
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01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
01-JUN-2003 (TrEMBLrel. 25, Last annotation update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Salmon-type gonadotropin-releasing hormone precursor GNRH3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-MAR-2003 (TYEMBLrel. 23, Created)
01-MAR-2003 (TYEMBLrel. 23, Last sequence update)
01-OCT-2003 (TYEMBLrel. 25, Last annotation update)
Gonadotropin-releasing hormone III precursor.
GNRH3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              90 AA.
GO; GO:0005576; C:extracellular; IEA.
GO; GO:0005179; F:hormone activity; IEA.
GO; GO:0007275; P:development; IEA.
InterPro; IPR002012; GR.H.
Pfam; PP00446; GR.H.; 1.
PROSITE; PS00473; GNRH; 1.
Anidation; Hormone; Signal.
STGNAL
24 33 SALMON-TYPE GO.
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90 AA; 10083 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             76.7%;
70.0%;
                                                                                                                                                                                                                                                                                             90 AA; 10090 MW;
                                                                                                                                                                                                                                                                                                                                              76.7%;
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                                                                                                                                                                                                                                                                                                                                                                  Local Similarity 70.0
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24 QHWSYGWLPG 33
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les 7; Conser
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us-09-857-115-6.rspt

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Torgersen J., Nourizadeh-Lillabadi R., Husebye H., Alestrom P.; "In Silico and In Situ Characterization of the Zebrafish (Danio rerio) GRRH III Gene.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           varurarizour (ITEMBLrel. 16, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
Salmon-type gonadotropin-releasing hormone (Gonadoliberin) (GnRH) (LH-
RH) (Luliberin).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
Cyprinidae; Carassius.
                                                      Characterization and Functional Studies of the Zebrafish (Danio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Two salmon gonadotropin-releasing hormone genes and their differential expressions in the goldfish Carassius auratus.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GONADOTROPIN RELEASING HORMONE.
GNRH ASSOCIATED PEPTIDE (GAP).
D0101FF655A81726 CRC64;
                                                                                                                                                                                                                                                                                                              Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Fisheries Sci. 66:49-57(2000).
-!- FUNCTION: STIMULATES THE SECRETION OF GONADOTROPINS (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 13; Length 94;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 56; DB 13; Length 94;
Pred. No. 0.64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10545 MW; 1EEASED54EC0468B CRC64;
                                                                                                            Thesis (1997), Department of Food Science,
Agricultural University of Norway, Aas, Norway
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -!- SIMILARITY: BELONGS TO THE GNRH FAMILY.
EMBL; AB017272; BAB18905.1; -.
GO; GO:0005576; C:extracellular; IEA.
GO; GO:0005179; F:hormone activity; IEA.
GO; GO:0007275; P:development; IEA.
InterPro: IPR00121; GnRH.
PROSITE; PS00473; GNRH; 1.
PROSITE; PS00473; GNRH; 1.
Amidation; Hormone.
SEQUENCE 94 AA; 10545 MW; IEEASED54EC0468)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  94 AA
                                                                                                                                                                                                                                                                                                                                                                                                  -! - SIMILARITY: BELONGS TO THE GNRH FAMILY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL, AJ304429, CACI8539.1; -.
EMBL, AR490364, ALb9224.1; -.
GO, GO:0005576, C:extracellular; IEA.
GO; GO:0005179; F:hormone activity; IEA.
GO; GO:0007275; P:development; IEA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Created
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Carassius auratus (Goldfish).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               37 94
94 AA; 10576 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              76.78;
70.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-MAR-2001 (TrEMBLrel. 16,
01-MAR-2001 (TrEMBLrel. 16,
01-JUN-2003 (TrEMBLrel. 24,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  76.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Amidation; Hormone; Signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   InterPro; IPR002012; GRRH.
PFam; PF00446; GRRH; 1.
PROSITE; PS00473; GNRH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 EHWSHGWYPG 10
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                                                                                    rerio) GnRH Gene.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
tes 7; Conserv
   FROM N.A.
                                                                                                                                                                                                    SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                       SIMILARITY).
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   RRARERER RRARER RRAPER 
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Oreochromis niloticus (Nile tilapia) (Tilapia nilotica).
Bukaryota, Metazca; Chordata, Craniata; Vertebrates; Buteleostomi;
Actinopterygii; Neopterygii; Teleostei; Buteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Labroidei;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Brachydanic rerio (Zebrafish) (Danio rerio).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
Cyprinidae; Danio.
                                                                                                                                                                                           SEQUENCE FROM N.A. Sakuma Y., Parhar I.S.; Sato H., Sakuma Y., Parhar I.S.; Molecular cloning of three kinds of GRH genes and 5' untranslated regions in tilapia (Orechromis niloticus) "; submitted (MAR-2003) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                     Parhar I.S., Ogawa S., Sakuma Y.;
Parhar I.S., Ogawa S., Sakuma Y.;
"Molecular cloning of tilapia (Oreochromis niloticus) GnRH cDNA.";
Submitted (FEB-2003) to the EMBL/GenBank/DDBJ databases.
EMBL; AB104863; BAC56156.1; -.
EMBL; AB101667; BAC56851.1; -.
EMBL; AB101667; FACTARCELIULAR; IEA.
GO; GO:0005576; C:extracellular; IEA.
GO; GO:0005775; Fibormone activity; IEA.
InterPro; IPR00212; GnRH.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-MAR-2001 (TrEMBLrel. 16, Created)
01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-UNN-2003 (TrEMBLrel. 24, Last annotation update)
Gonadotropin releasing hormone precursor (Gonadoliberin) (GnRH)
RH) (Luliberin).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     salmon-type gonadotropin-releasing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 56; DB 13; Length 90;
Pred. No. 0.61;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Submitted (DEC-2000) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GnRH-associated peptide.
GnRH-associated peptide.
B3637E3839A53A4E CRC64;
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Thesis (1997), Department of Food Science,
Agricultural University of Norway, As, Norway.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             94 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Potential
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  90 AA; 10083 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            76.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pfam, PF00446; GnRH; 1.
Signal. 1 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity 70.07; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRELIMINARY;
                                                                                                               Cichlidae, Oreochromis
NCBL TaxID=8128;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          33
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SEQUENCE FROM N.A.
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NCBI_TaxID=7955;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TISSUE=Brain;
                                                                                                                                                                                                                                                                                                                                                                                                  TISSUE=Brain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alestrom P.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local S
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Gaps

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94 AA.
                                                                                  -!- SIMILARITY: BELONGS TO THE GNRH FAMILY.
BMBL, AB017271; BAB18904.1, -.
GO; GO:0005576; C:extracellular; IEA.
GO; GO:0005779; F:hormone activity; IEA.
GO; GO:0007275; P:development; IEA.
Interpro; IPR002012; GnEH.
PFam; PF00446; GRRH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                        Salmon-type gonadotropin-releasing hormone.
                                                                                                                                                                                                                                                 2; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                  01-0CT-2002 (TrEMBLrel. 22, Created)
01-0CT-2002 (TrEMBLrel. 22, Last seg
01-JUN-2003 (TrEMBLrel. 24, Last ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRT;
                                                                                                                                                                                                                                                                                                                                                             PRT;
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70.0%;
                                                                                                                                                                                                                        76.7%;
70.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 70.0
                                                                                                                                                                                                                       Query Match
Best Local Similarity 70.0
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                             PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRELIMINARY;
                                                                                                                                                                                                                                                                         1 EHWSHGWYPG 10
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24 QHWSYGWLPG 33
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24 QHWSYGWLPG 33
  SEQUENCE FROM N.A.
                                                                                                                                                                                                SEQUENCE
                                                                                                                                                                                                                                                                                                                                                           QBJHC3
QBJHC3;
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0804C1
1D 0804C
D7 01-JU
DT 01-JU
DT 01-JU
DT 01-JU
DT 01-JU
ON GNRH.
                                                                                                                                                                                                                                                                                                                                     RESULT 32
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               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Carassius auratus (Goldfish).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
Cyprinidae; Carassius.
NCBI_TaxID=7957;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-MAR-2001 (TrEMBLrel. 16, Created)
01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
Salmon-type gonadotropin-releasing hormone (Gonadoliberin) (GnRH)
RH) (Luliberin)
                                                                                                                                                                                                               Scleropages jardinii (Australian bonytongue).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Actinopterygii, Neopterygii; Teleostei; Osteoglossomorpha;
Osteoglossiformes; Osteoglossidae; Scleropages.
                                                                                                                                                                                                                                                                                                         TISSUE=Brain;

MEDLINE=21560666; PubMed=11703078;

Okubo, K., Aida Ks; in Amenia Ks; in a primitive teleost,

"Gonadotropin-releasing hormones (GnRHs) in a primitive teleost,

arowana: phylogenetic evidence that three paralogous lineages of

occurred prior to the emergence of teleosts.";

Gen. Comp. Endocrinol, 124:125-133 (2011).

-!- FUNCTION: STIMULATES THE SECRETION OF GONADOTROPINS (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  POTENTIAL. SALMON-TYPE GONADOTROPIN-RELEASING
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01-MAR-2002 (TrEMBLrel. 20, Created)
01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
01-UNR-2003 (TrEMBLrel. 20, Last sequence update)
01-UNR-2003 (TrEMBLrel. 24, Last annotation update)
Prepro-salmon-type gonadotropin-releasing hormone precursor (Gonadoliberin) (GnRH) (LH-RH) (Luliberin).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 56; DB 13; Length 94;
Pred. No. 0.64;
2; Mismatches 1; Indels
               1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HORMONE.
7790050E92FA0D66 CRC64;
 Pred. No. 0.64;
2; Mismatches
                                                                                                                           94 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                     -1- SIMILARITY: BELONGS TO THE GNRH FAMILY.
EMBL. AB047725; BAB72182.1, -.
GO; GO:0005576; C:extracellular; IEA.
GO; GO:0005179; F:hormone activity; IEA.
GO; GO:007775; F:development; IEA.
InterPro; IPR002012; GnRH.
PF00446; GRRH.1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
                                                                                                                          PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       94 AA; 10541 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                76.7%;
70.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PROSITE; PS00473; GNAL, Amidation; Hormone; Signal. SignAL 1 23
Best Local Similarity 70.0
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                          PRELIMINARY;
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QHWSYGWLPG 33
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                                      1 EHWSHGWYPG 10
                                                             24 OHWSYGWLPG 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
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                                                                                                 RESULT 30
Q8UUK6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cyprinus Carpio (Common carp).
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Actinopterygii, Neopterygii, Teleostei, Ostariophysi, Cypriniformes,
Cyprinidae, Cyprinus.
NCBI_TaxID=7962,
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"Two salmon gonadotropin-releasing hormone genes and their differential expressions in the goldfish Carassius auratus."; Fisheries Sci. 66:49-57(2000).
-i-FUNCTION: STIMULATES THE SECRETION OF GONADOTROPINS (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 56; DB 13; Length 94;
Pred. No. 0.64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 56; DB 13; Length 94;
Pred. No. 0.64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.

Li S., Hu W., Wang Y., Zhu Z.;

Li S., Hu W., Wang Y., Zhu Z.;

"Gene clone and promoter functional analysis of sGRRH.";

Submitted (JUN-2002) to the EMBL/GenBank/DDBJ databases.

EMBL; AFS21130; AAM77660.1;

GO; GO:0005576; C:extracellular; IEA.

GO; GO:0005775; F:hormone activity; IEA.

GO; GO:0007775; P:development; IEA.

InterPro; IPR002012; GRRH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PFam, PF00446, GnRH; 1.
PROSITE; PS00473; GNRH; 1.
SEQUENCE 94 AA; 10445 MW; C3DD3F7C2A852A80 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                  94 AA; 10573 MW; 0141745425917E85 CRC64;
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01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
01-GCT-2003 (TrEMBLrel. 25, Last annotation update)
Salmon-type gonadotropin-releasing hormone precursor.
GNRH.
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Last annotation update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Li S.F., Hu W., Wang Y.P., Zhu Z.Y.;

Li dissected brain regions in the common carp.";

Submitted (FEB-2003) to the EMBL/GenBank/DDBJ databases.

EMBL, AY186621, AA03975.2;

EMBL, AY186621, AA03975.2;

GO, GO:0005179; F:hormone activity; IEA.

GO, GO:0007275; P:development; IEA.

InterPro: IPRO20121; GnHH.

PROSITE; PS00473; GNH; 1.
                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
Cyprinidae; Cyprinus.
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Actinopterygii, Neopeerygii, Teleostei, Ostariophysi, Cypriniformes,
Cyprinidae, Cyprinus.
                                                                                                                                                                                                                                                                                                                                                                                                            SALMON-TYPE GONADOTROPIN-RELEASING HORMONE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                SALMON-TYPE GONADOTROPIN-RELEASING HORMONE ASSOCIATED PEPTIDE. COCFAC6980BFBD36 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 56, DB 13, Length 94, Pred. No. 0.64, 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           76.7%; Score 56; DB 13; Length 94; 70.0%; Pred. No. 0.64; Live 2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-070X-2003 (TrEMBLrel. 24, Created)
01-070X-2003 (TrEMBLrel. 24, Last sequence update)
01-077-2003 (TrEMBLrel. 25, Last annotation update)
Salmon-type gonadotropin-releasing hormone preproprotein
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SEQUENCE 94 AA; 10574 MW; 131D9882247E7E85 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cyprinus carpio (Common carp).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                94 AA; 10698 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           / Match 76.7%;
Local Similarity 70.0%;
les 7; Conservative
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Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                     33
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             :|||:|| ||
24 QHWSYGWLPG 33
                                                                                                                                                                                                                                                                                                                                                                                                     1 2 4 5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                Signal.
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Q801D6;
                                                                                                                                                                                                                                                                                                                                                                                                                          CHAIN
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Matches
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108010
AC 08010
DT 01-0C
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1 EHWSHGWYPG 10

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Li S.F., Hu W., Wang Y.P., Zhu Z.Y.;
Li dissected brain regions in the common carp.";
Submitted (PEB-2003) to the EMBL/GenBank/DDBJ databases.

EMBL, AY186622; AA039976.2;
EMBL, AY186622; AA039976.2;
EMBL, PA186622; AA039976.2;
EMBL, PY186621; P. Hormone activity; IEA.

GO; GO:0005775; P. Hormone activity; IEA.

InterPro; IPRO2012; GARH.

PROSITE; PS00473; GARH; 1.
                                                                                                                                                                                                                                                                                  Cyprinus carpio (Common carp).

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
Cyprinidae; Cyprinus.
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TISSUB=Endometrium;

TISSUB=Endometrium;

TISSUB=Endometrium;

TISSUB=Endometrium;

TISSUB=Endometrium;

TISSUB-Endometrium;

Submitted (SEP-1999) to the EMBL/GenBank/DDBJ databases.

BMBL, AF190640; AAG17539.1; -...

NOW_TER 63 63 63 6758 MW; F726BBCB9DB4F181 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (Human).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                                                       Q801D5;
01-JUN-2003 (TrEMBLrel. 24, Created)
01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Salmon-type gonadotropin-releasing hormone II preproprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 56, DB 13; Length 94;
Pred. No. 0.64;
2; Mismatches 1; Indels
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SEQUENCE 94 AA; 10708 MW; COCFACGAB08CBD36 CRC64;
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01-MAR-2001 (TrEMBLrel. 16, Created)
01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-MAR-2001 (TrEMBLrel. 16, Last annotation update)
Endometrium-specific GnRH-II (Fragment).
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100.0%; Pred. No. 4.3;
iive 0; Mismatches
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                                                                          94 AA
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Best Local Similarity 70.0%;
Matches 7; Conservative
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Best Local Similarity 100.0
                                                                          PRELIMINARY;
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                                                                                                                                                                                                                                                                              precursor.
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                                                                          Q801D5
RESULT 35
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DAC Q8010
DT 01-JU
DT 
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Q9HBX7
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65.18;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 97.5
Matches 7; Conservative
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                                                                                                                                                 256 HW-HGWYP 262
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                                                                                                     2 HWSHGWYP 9
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SEQUENCE FROM N.A.
TISSUE=Fetal;
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                                                                                                                                                                                                                                                              027690
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015885
AC 01588
AC 01588
DT 01-NO
DT 01-NO
DT 01-NO
DT 01-NO
DE Parti
DE Parti
CC Mamma
OC Mamma
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027690
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                       Alosa sppidissima (American shad).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Actinopterygii, Neopterygii, Teleostei, Clupeomorpha, Clupeidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
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Archaea, Euryarchaeota, Methanobacteria; Methanobacteriales;
Methanobacteriaces; Methanothermobacter.
MCBI_TAXID=187420;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 48; DB 13; Length 86;
Pred. No. 8.1;
1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A. Abraham E., Gothilf Y., Zohar Y.; Abraham E., Gothilf Y., Zohar Y.; "American should (Allosa sapidissima) hrGnRH sequence."; submitted (AUG-2002) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          319 AA; 35602 MW; AB65763CEFCC6C47 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pfam; PF00446; GnRH; 1.
PROSITE; PS00473; GNRH; 1.
SEQUENCE 86 AA; 9554 MW; 8E4921F3CF2350E3 CRC64;
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GO; GO:00156021; C:integral to membrane; IEA.

GO; GO:0005524; F:ATP binding; IEA.

GO; GO:0006208; F:ATP binding; IEA.

GO; GO:0006508; F:Peptidase activity; IEA.

GO; GO:0006508; P:proteolysis and peptidolysis; IEA.

InterPro; IPR005074; Peptidase C39.

Fam; PF03412; Peptidase C39; I.

Complete proteore.

SEQUENCE 319 AA; 35602 MM; AB65763CEFCC6C47 CRC6
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01-JAN-1998 (TrEMBLrel. 05, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
                                                                                    01-0CT-2002 (TrEMBLrel. 22, Created)
1-0CT-2002 (TrEMBLrel. 22, Last sequence update)
01-UTN-2003 (TrEMBLrel. 24, Last annotation update)
Gonadotropin-releasing hormone.
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                                               86 AA
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GO, GO:0005576; C:extracellular; IEA.
GO; GO:0005179; F:hormone activity; IEA.
GO; GO:0007275; F:development; IEA.
InterPro; IFA002012; GnRH.
Pfam; PF00446; GnRH, 1.
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nes 7; Conservative
                                            PRELIMINARY;
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Matches
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EMBL, ABG00924, AAB86125.1; --
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                                                            Gaps
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Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-NOV-1996 (TrEMBLrel. 01, Created)
01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
Partial cDNA sequence, clone x529, unknown open reading frame;
(Fragment).
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      DB 17; Length 319;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Methanobacterium thermoautotrophicum.
Archaea; Buryarchaeota; Methanobacteria; Methanobacteriales;
Methanobacteriaceae; Methanothermobacter.
NCBI_TaxID=187420;
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                                                            Indels
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GO; GO:0016021; C:integral to membrane; IEA.

GO; GO:0008234; F:integral to minding; IEA.

GO; GO:0008233; F:peptidase activity; IEA.

GO; GO:0006508; F:peptidase activity; IEA.

InterPro; IRPROSO74; Peptidase_C39.

Plan; PG03412; Peptidase_C39; 1.

Complete protecome.
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Score 47.5; DE Pred. No. 35; 0; Mismatches
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Octopus vulgaris (Octopus).
Bukaryota, Metazoa; Mollusca; Cephalopoda; Coleoidea; Neocoleoidea;
Octopodiformes; Octopoda; Incirrata; Octopodidae; Octopus.
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                                                                                NCBI_TaxID=6645;
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01-MAR-2002
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Q8X5D0
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Kawabata A., Hikiji T., Kobatake N., Inagaki H., Ikema Y., Okamoto S.,
Kawabata A., Hikiji T., Kobatake N., Inagaki H., Ikema Y., Okamoto S.,
Okitani R., Ota T., Suzuki Y., Obayashi M., Nishi T., Shibahara T.,
Tamaka T., Nakamura Y., Isogai T., Sugano S.;
Tamaka T., Nakamura Y., Isogai T., Sugano S.;
Submitted (AUG-2000) to the EMBL/GenBank/DDBJ databases.
EMBL, AK025589; BAB15181.1;
                                                                                                                                                                                                                                                                                       Beckmann J.S.;
"A primary expression map of the chromosome 15q15 region containing the recessive form of limb-girdle muscular dystrophy (LGMD2A) gene.";
Hum. Mol. Genet. 4:717-725(1995).
EMBL; Z47043; CAA87105.1; -...
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01-MAR-2001 (TrEMBLrel. 16, Last aequence update)
01-ORT-2002 (TrEMBLrel. 16, Last aequence update)
01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
Hypothetical protein FLJ21936 (Fragment).
Bydochetical protein FLJ21936 (Fragment).
Bydochetical protein FLJ21936 (Fragment).
Bydochetical protein FLJ21936 (Fragment).
Bydochetical primates; Catarrhini; Hominidae; Homo.
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Pred. No. 49;
1; Mismatches 2; Indels
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Chiannilkulchai N., Pasturaud P., Richard I., Auffray C.,
Chiannilkulchai N., Pasturaud P., Richard I., Auffray C.
                                                                                                                                             Genethon;
Submitted (DEC-1994) to the EMBL/GenBank/DDBJ databases.
                        Beckmann J.S.;
"CDNA selection in the LGMD2A region.";
Submitted (CGT-1995) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                               380 380 380 380 AM; 6F5BF18C84D8FF55 CRC64;
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Last annotation update)
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66.7%; Pred. No. 1.1e+02;
iive 1; Mismatches 2;
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Best Local Similarity 60.,
6; Conservative
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01-JUN-2002 (TrEMBLrel.
01-JUN-2002 (TrEMBLrel.
GARH-related peptide.
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SEQUENCE FROM N.A.
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SEQUENCE
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SEQUENCE
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Q8T8D2
ID Q8T8D
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DT 01-JU
DE GDRH:
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MEDLINE=21156231; PubMed=11258736; MEDLINE=21156231; PubMed=11258736; MEDLINE=21156231; PubMed=11258736; MEDLINE=21156231; PubMed=11258736; Minzata T., Ishii K., Yokoyama K., Han C.-G., Ohtsubo E., Nakayama K., Minzata T., Tanaka M., Tobe T., Iida T., Takami H., Honda T., Sasakawa C., Ogasawara N., Yasunaga T., Ruhara S., Shiba T., Hattori M., Shinagawa H., Subara Genome sequence of enterchemorrhagic Escherichia coli O157:H7 and genomic comparison with a laboratory strain K-12."; EMBL; AR00458; AAK16643.1; -.
                                                                                                                                                                                                                                                                                                                                                                                         Gaps
SECUENCE FROM N.A.
MEDLINE=21881366; PubMed=11883942;
Iwakoshi E., Takuwa-Kuroda K., Fujisawa Y., Hisada M., Ukena K.,
Tsutsui K., Minakata H.;
"Isolation and Characterization of a GnRH-like Peptide from Octopus
vulgaris.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-MAR-2002 (TrEMBLrell. 20, Last sequence update)
01-OCT-2003 (TrEMBLrell. 25, Last annotation update)
ututive tail fiber protein (Putative tail fiber protein of cryptic prophage CP-933P).
Z6027 OR ECS1808.
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Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales; Enterobacteriaceae; Escherichia.
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                                                                                                                                                                                                Bicchem. Biophys, Res. Commun. 291:1187-1193(2002).
EMBL, AB037165, BAB6782.1; -.
SEQUENCE 89 AA; 9977 MW; 883D43937ABB3768 CRC64;
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85.7%; Pred. No. 1.1e+02;
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Pred. No. 16;
3; Mismatches
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MEDLINE=21074935; PubMed=11206551;
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InterPro; IPR008969; CarboxypepD_reg.
InterPro; IPR008160; Collagen.
Pfam; Pf01391; Collagen; 2.
Complete protecome
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Best Local Similarity 66.7%;
Matches 6; Conservative
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Escherichia coli O157:H7.
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PIR; E90968; E90968.
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SEQUENCE 439 AA
                                                                                  NCBI_TaxID=83334;
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MEDLINE=21156231; PubMed=11258796;

Hayashi T., Makino K., Obbmed=11258796;

Hayashi T., Makino K., Makayama K., Murata T., Tanaka M., Tobe T.,

Han C.-G., Ohtsubo E., Nakayama K., Murata T., Tanaka M., Tobe T.,

Ilida T., Takami H., Honda T., Sasakawa C., Ogasawara N., Yasunaga T.,

Kuhara S., Shiba T., Hattori M., Shinagawa H.;

"Complete genome sequence of enterohemorrhagic Escherichia coli

0157:H7 and genomic comparison with a laboratory strain K-12.";

BMBL; AR005550; AAG56213.1; -.

EMBL; A85719; A85719.

PIR; C90769; C90769.
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01-MAR-2002 (TrEMBLrel. 20, Created)
01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Putative tail fiber protein (Putative tail fiber protein of prophage
CE-933U)
      Gaps
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MEDLINE=21074935; PubMed=11206551;
Perna N.T., Plunkett G. III, Burland V., Mau B., Glasner J.D.,
Rose D.J., Mayhew G.F., Evans P.S., Gregor J., Kirkpatrick H.A.,
Posfai G., Hackett J., Klink S., Boutin A., Shao Y., Miller L.,
Grotbeck E.J., Davis N.W., Lim A., Dimalanta E.T., Potamousis K.,
Apodaca J., Anantharaman T.S., Lin J., Yen G., Schwartz D.C.,
Welch R.A., Blattner F.R.;
"Genome sequence of enrechaemorrhagic Escherichia coli 0157:H7.";
Nature 409:529-533 (2001).
                                                                                                                                                                                                                                                                                                                                01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Putative tail fiber protein of prophage CP-9330.
E32147 OR EGS112.
Escherichia coli 0157:H7.
Bacteria, Proteobacteria, Gammaproteobacteria; Enterobacteriales,
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Pred. No. 1.1e+02;
1; Mismatches 0; Indels
      Indels
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   1; Mismatches
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InterPro; IPR008160; Collagen.
Pfam; PF01391; Collagen; 2.
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85.7%;
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Best Local Similarity 65...
6; Conservative
   6; Conservative
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                                                                                                    SHGWFPG 383
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                                                             4 SHGWYPG 10
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                                                                                                                   377
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                                                                                                                                                                                                                                                                Q8XEG4
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08X5A7
1D Q8X5A
AC Q8X5A
DT 01-MAD
DT 01-0C
DE CP-93.
GN Z3074
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108XEG4
10 MAXEG
AC 08XEG
AC 08XEG
DT 01-MAX
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DENGLINE=22893575; PubMed=12697698; Adams B.A., Tello J.A., Erchegyi J., Warby C., Hong D.J., Adams B.A., Tello J.A., Erchegyi J., Warby C., Hong D.J., Akrimanya K.O., Mackie G.O., Vale W., Rivier J.E., Sherwood N.M.; Six Novel Gonadotropin-Releasing Hormones Are Encoded as Triplets on Each of Two Genes in the Protochordate, Ciona intestinalis."; Endocrinology 144:1907-1919(2003).

EMBL, AX204706; AAPD6793.1;

GO, GO:0005576; C:extracellular; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE=22735913; PubMed=12835416; Gloeckner F.O., Kube M., Bauer M., Teeling H., Lombardot T., Gloeckner F.O., Kube M., Bauer M., Teeling H., Lombardot T., Schlesner H., Amann R., Reinhardt R.; Schlesner H., Amann R., Reinhardt R.; Complete genome sequence of the marine planctomycete Pirellula sp. strain 1.";
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Eukaryota, Metazoa, Chordata, Urochordata, Ascidiacea, Enterogona,
Phlebobranchia, Cionidae, Ciona.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bacteria; Planctomycetes; Planctomycetacia; Planctomycetales; Planctomycetacese; Pirellula.
NCBI_TaxID=117;
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                                                                                                                                                                                                      Length 415;
                                                                                                                                                                                               60.3%; Score 44; DB 2; Length 415
58.3%; Pred. No. 1.46+02;
vative 1; Mismatches 0; Indels
Waterfield N.R., ffrench-Constant R.H.;
"Genomic islands in the insect pathogen Photorhabdus.";
Trends Microbiol. 0:0-0(2003).
EMBL; AX144118; AAN642081.;
SEQUENCE 415 AA; 48343 MW; D1691D85246B8BAE CRC64;
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01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Preprogonadotropin-releasing hormone 1 precursor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-OCT-2003 (TIEMBLrel. 25, Created)
01-OCT-2003 (TIEMBLrel. 25, Last sequence update)
01-OCT-2003 (TIEMBLrel. 25, Last annotation update)
Sodium/glucose cotransporter.
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EMBL; BX294140; CAD73860.1; -.
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                                                                                                                                                                  Query Match
Best Local Similarity 58...
T; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                         207 YWHASASHGWYP 218
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SEQUENCE 602 AA;
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Q86D90;
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Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
Enterobacteriaceae; Photorhabdus.
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A Comstock L.E., Coyne M.J., Tzianabos A.O., Pantosti A.,
A Onderdonk A.B., Kasper D.L.;
Conderdonk A.B., Kasper D.L.;
Analysis of a capsular polysaccharide biosynthesis locus of Bacteroides fragilis.,
I infect. Immun. 67:3525-3532(1999).
R BAL; AF048749; AD40719-1; ---
R GO; GO:0016740; Fitransferase activity; IEA.
R GO; GO:0016740; Fitransferase activity; IEA.
R GO; GO:0016786; Glycotrans 1.
R InterPro; IPR001296; Glycotrans 1.
R Fam: PF00534; Glycos_transf_1; 1.
Transferase.
O SEQUENCE 377 AA; 43999 MW; BS3EDDEA946D540F CRC64;
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Bacteroidaceae; Bacteroides.
                                                                                                                                                                                                                                                                                                           Length 1333;
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                                                                                                                                                                                                                                                                                                    Similarity 85.7%; Score 45; DB 2; Length 133 Similarity 85.7%; Pred. No. 3.3e+02; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                      1333 AA; 147537 MW; 7180746EDAB5DC7D CRC64;
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01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
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01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
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60.3%; Score 44; DB 2; I
Best Local Similarity 83.3%; Pred. No. 1.3e+02;
Matches 5; Conservative 1; Mismatches 0;
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                                Pfam; PF00550; pp-binding; 1.
PRINTS; PR00154; AMPBINDING.
PROSITE; PS50075; ACP_DOMAIN; 1.
PROSITE; PS00455; AMP_BINDING; 1.
PROSITE; PS00012; PHOSPHOPANTETHEINE; 1.
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       Pfam; PF00668; Condensation; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              494 EEWSHGW 500
                                                                                                                                                                                                          Phosphopantetheine.
SEQUENCE 1333 AA;
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                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                             1 EHWSHGW 7
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SEQUENCE FROM N.A.
STRAIN=W14;
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10 08GDL/
AC 08GDL AC 08GDL/
DT 01-MAD DT 01-MAD DT 01-MAD DT 01-MAD DT 01-MAD DT 00-MAD DT 00-M
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Matches
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09XDJ6
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DR GO; GO:0005179; F:hormone activity; IEA.

DR GO; GO:0007275; P:development; IEA.

DR InterPro; IPR00212; GnRH.

DR PROSITE; PS00473; GNRH; 3.

KW Signal.

FT CHAIN 115 124 gonadotropin-releasing hormone 3.

FT CHAIN 138 147 gonadotropin-releasing hormone 5.

FT CHAIN 138 147 gonadotropin-releasing hormone 5.

FT CHAIN 138 147 gonadotropin-releasing hormone 6.

FT CHAIN 138 147 GONBUSCHOOLE 1984: 24970 MW; BRAO545882DCDBF7 CRC64;
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 Query Match
 58.9%;
 Score 43;
 DB 5;
 Length 219;

 Best Local Similarity
 60.0%;
 Pred. No. 1.1e+02;

 Matches
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GenCore Copyright (c) 1993 OM protein - protein search, using sw Run on: March 2, 2004; 19:24	Title: Perfect score: 73 Sequence: 73 Sequence: 73 Scoring table: BLOSUM62 10 Searched: 389414 seqs, 51625971 Total number of hits satisfying chose Minimum DB seq length: 0 Maximum DB seq length: 0 Maximum DB seq length: 0 Maximum Match 0% Dost-processing: Minimum Match 10% Listing first 500 su	Database : Issued_Patents_AA 1: /cgn2_6/ptodat. 2: /cgn2_6/ptodat. 3: /cgn2_6/ptodat. 4: /cgn2_6/ptodat. 5: /cgn2_6/ptodat. 5: /cgn2_6/ptodat. 6: /cgn2_6/ptodat. 6: /cgn2_6/ptodat. and is the number of r score greater than or equal and is derived by analysis on the score greater than or equal and is derived by analysis on the score watch by analysis on the score match Length DB I	2 7 3 100.0 2 7 7 3 1000.0 5 6 6 8 93.2 5 9 8 9 1 10 10 10 10 10 10 10 10 10 10 10 10 1

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Sequence 1172, Ap Sequence 1173, Ap Sequence 1147, Ap Sequence 1146, Ap Sequence 1172, Ap Sequence 1172, Ap Sequence 1172, Ap Sequence 1173, Ap Sequence 1174, Ap Sequence 1174, Ap Sequence 1175, Application 1175, Ap Sequence 1175, Ap Sequence 1175, Application 117	
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GENERAL INFORMATION:
APPLICANT: Zohar, Y.
APPLICANT: Sohar, Y.
APPLICANT: Sharwood, N.
APPLICANT: General, J.
APPLICANT: Compounds and Methods For Controlling
TITLE OF INVENTION: Reproduction in Fish
NUMBER OF SEQUENCES:
ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
STATE: N.Y.
COUNTY: USA
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COUNTEY.

ZIP: 10036-2711

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPRATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NATA:
APPLICATION NATA:
ATCORNEY/AGRAT INFORMATION:
NAME: COLUZZI, Laura A.
REGISTRATION: S14
ATTORNEY/AGRAT NUMBER: 8399-003-999
TELERPHONE: (212) 869-864/9741
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
LENGTH: 85 amino acids
TYPE: amino acid
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100.0%; Score 73; DB 3; I
Best Local Similarity 100.0%; Pred. No. 6.1e-05;
Matches 10; Conservative 0; Mismatches 0;
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LOCATION: 10
OTHER INFORMATION: /product= "OTHER"
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Sequence 22, Application US/08341219
Patent No. 5643877
TELEFAX: (212) 869-8864/9741
INFORMATION FOR SEQ ID NO: 16:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
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TYPE: amino acid
STRANDEDNESS: not relev
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APPLICANT: Zohar, Y.
APPLICANT: Rivier, J.
APPLICANT: Powell, J.
APPLICANT: Sherwood, N.
APPLICANT: Gothilf, Y.
TITLE OF INVENTION: Compounds and Methods For Controlling
TITLE OF INVENTION: Reproduction in Fish
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
100.0%; Score 73; DB 1; Length 10
Best Local Similarity 100.0%; Pred. No. 6.1e-05;
Matches 10; Conservative 0; Mismatches 0; Indels
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ZIP: 1036-2711
COMPUTER READBLE FORM:
MEDTION TYPE: Floppy disk
COMPUTER: IBM PC compatible
OMPUTER: PATENTIAL Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/912,314A
FILING DATE: 30-JUN-1997
CLASSIFICATION NUMBER: 514
PRIOR APPLICATION NUMBER: 08/341,219
FILING DATE: 05-DEC-1994
ATTORNEY/AGENTINFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /product= "OTHER"
/label= Glu1
/note= "=pyroglutamic acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCATION: 10

OTHER INFORMATION: /product= "OTHER"
OTHER INFORMATION: /label= Gly10
US-08-341-219-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CIIY: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 2
US-08-912-314A-16
; Sequence 16, Application US/08912314A
; Parent No. 6210927
                                                 TELEPHONE: (212) 790-9090
TELEPAX: (212) 869-8864/9741
INFORMATION FOR SEQ ID NO: 16: SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
TYPE: amino acid
STRANDEDNESS: not relevant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: Coruzzi,, Laura A.
REGISTRATION NUMBER: 30742
REFERENCE/POCKET NUMBER: 83
TELECOMMUNICATION INFORMATION: (212) 790-9090
                     TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                   SS: not relevant
unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: Modified-site
LOCATION: 1
OTHER INFORMATION: /produ
OTHER INFORMATION: /label:
OTHER INFORMATION: /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
NAME/KEY: Modified-site
                                                                                                                                                                                                                                                                                                   MOLECULE TYPE: peptide HYPOTHETICAL: NO ANTI-SENSE: NO FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 EHWSHGWYPG 10
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US-08-912-314A-9
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                                                                                                                                                                                                                                                                                                                                          Sequence 22, Application US/08912314A

Sequence 22, Application US/08912314A

Sequence 22, Application US/08912314A

GENERAL INFORMATION:

APPLICANT: Rivier, J.

APPLICANT: Rherwood, N.

APPLICANT: Sherwood, N.

APPLICANT: Gethiff, Y.

TITLE OF INVENTION: Compounds and Methods For Controlling

TITLE OF INVENTION: Reproduction in Fish

NUMBER OF SEQUENCES: 26

CORRESPONDENCE ADDRESS:

ADDRESSEE: Pennie & Edmonds

ADDRESSEE: Pennie & Edmonds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 70; DB 3; Length 85;
Pred. No. 0.0014;
1; Mismatches 0; Indels
                                                                                                                                        Length 85;
                                                                                                                                                                            0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION DATA:

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/912,314A
FILING DATE: 05-JUN 1997
CLASSIFICATION S14
PRIOR APPLICATION S14
PRIOR APPLICATION NUMBER: 08/341,219
FILING DATE: 05-DEC-1994
ATTORNEY/AGENT INPORMATION:
NAME: COLUZZI, LAUZA
REGISTRATION NUMBER: 30742
REFERENCE/DOCKET NUMBER: 3079
TELEDOMUNICATION INFORMATION:
TELEDOMUNICATION INFORMATION:
TELEDOMUNICATION INFORMATION:
TELEDOMUNICATION OF 22:
SEQUENCE CHARACTERISTICS:
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 85 aming acids
                                                                                                                                                                            1; Mismatches
                                                                                                                                      Score 70;
Pred. No. (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEE: Pennie & Edmonds
: 1155 Avenue of the Americas
New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: USA
ZIP: 10036-2711
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           not relevant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  95.9%;
STRANDEDNESS: not relevant
                                                                                                                                        95.9%;
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Best Local Similarity 90.0
Matches 9; Conservative
                                                                                                                                      Query Match
Best Local Similarity 90.0
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: unknown
MOLECULE TYPE: peptide
HYPOTHETICAL: NO
                                        peptide
                                                                                                                                                                                                                     1 EHWSHGWYPG 10
                                                                                                                                                                                                                                                           24 QHWSHGWYPG 33
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STRANDEDNESS: not
                         unknown
                   TOPOLOGY: unkn

MOLSCULE TYPE: p

HYPOTHETICAL: NO

SANTI-SENSE: NO

US-08-341-219-22
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CITY: New YO
STATE: N.Y.
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US-08-912-314A-22
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1 EHWSHGWYPG 10

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24 QHWSHGWYPG 33

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Gaps
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                                                                                                   APPLICANT: Rivier, J.
APPLICANT: Powell, J.
APPLICANT: Sherwood, N.
APPLICANT: Sherwood, N.
APPLICANT: Gothilf, Y.
TITLE OF INVENTION: Compounds and Methods For Controlling
TITLE OF INVENTION: Reproduction in Fish
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS: ADDRESSE: Rennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
STATE: N.Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Zohar, Y.
APPLICANT: Rivier, J.
APPLICANT: Rivier, J.
APPLICANT: Powell, N.
APPLICANT: Shewood, N.
APPLICANT: Gothilf, Y.
APPLICANT: COMMONERS: COMMONER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                           STATE: N.1.

COUNTRY: USA
ZIP: 10036-2711

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
COMPOTER: IBM PC COMPATIBLE
COMPATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIA Release #1.0, Version #1.30
SOFTWARE: PATENTIA RELEASE #1.0, Version #1.30
CURRENT APPLICATION NUMBER: US/08/341,219
FILING DATE: 05-DEC-1994
CLASSIFICATION NUMBER: 05-DEC-1994
ATTORNEY/AGENT INFORMATION:
REGISTRATION NUMBER: 30742
REFERENCE/DOCKET NUMBER: 30742
REFERENCE/DOCKET NUMBER: 30742
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-8864/9711
INPORMATION FOR SEQ ID NO: 9: SEQUENCE CHARACTERISTICS:
LENGTH: 9 amino acids
...... amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ore 68; DB 1; 1
red. No. 3e+05;
Mismatches 0
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STREET: 1155 Avenue of the Americas
CITY: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 9, Application US/08912314A Patent No. 6210927
; Sequence 9, Application US/08341219; Patent No. 5643877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 100.
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: unknown MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 HWSHGWYPG 10
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STRANDEDNESS: sir
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APPLICANT: Siler-Khodr, Theresa M.
TITLE OF INVENTION: No. 6635739-Mammalian GRRH Analogs and Uses Thereof in Regulation
TITLE OF INVENTION: Pregnancy
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NAMB/KEY: mat peptide
LOCATION: Within brain mRNA 121-150, within brain gene 2174-2203.
LOCATION: Within brain mRNA 121-150, within brain gene 2174-2203.
OCTHER INFORMATION: MOD_RES substitution of Gly residue at 10 by -aza-Gly-NH2.
OCTHER INFORMATION: Xaa_represents D-Arg.MOD_RES Glu at position 1 is
OTHER INFORMATION: pyroglutamic acid.
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                                                                                                                                                                                                                                                                                                                                                                                                                LOCATION: 1..10
OTHER INFORMATION: /note= "Xaa in position 1 denotes pyro-glutamic acid. This sequence is chicken II GnRH."
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
93.2%; Score 68; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.00032;
Matches 9; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1; Indels
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CLASSIFICATION: <UDK...
ATTORNEY/ACHT INFORMATION:
NAME: Runnels, John H
REGISTRATION NUMBER: 33,451
REFERENCE/DOCKET NUMBER: 96A3.2-US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (225) 387-321
TELEPHONE: (225) 346-8049
INFORMATION FOR SEQ. ID NO: 18:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 2, Application US/09419161
Patent No. 6323179
GENERAL INFORMATION:
APPLICATION: Silet-Khodt, Theresa M.
TITLE OF INVENTION: No. 6323179-Mammalian GRRH; TITLE OF INVENTION: Fertility and Pregnancy FILE REPRENCE: P7345.2
CURRENT APPLICATION NUMBER: US/09/419,161
CURRENT FILING DATE: 1999-10-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; SEQUENCE DESCRIPTION: SEQ ID NO: 18:
US-09-381-879-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; Sequence 2, Application US/09941094C; Patent No. 6635739; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: Prt
ORGANISM: Chicken II GnRH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 EHWSHXWYPG 10
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Enright, Frederick M.
Jaynes, Jesse M.
Hansel, William
Konce, Kenneth L.
McCan, Samuel M.
Yu, Wen H.
Melrose, Patricia A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                               CURRENT APPLICATION DATA:

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/912,314A

FILNG DATE: 30-UN-1997

CLASSIFICATION DATA:

PRIOR APPLICATION DATA:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/341,219

FILING DATE: 05-DEC-1994

ATORNEY/AGENT INFORMATION:

NAME: COLUZZI, LAURA A.

REGISTRATION NUMBER: 30742

REGISTRATION NUMBER: 3099-003-999

TELEPHONE: (212) 790-9990

TELEPHONE: (212) 869-8864/9741

INFORMATION FOR SEQ ID NO: 9:

SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         93.2%; Score 68; DB 3;
100.0%; Pred. No. 3e+05;
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/381,879
FILING DATE: 25-Aug-1999
                                                                             STATE: N.Y.
COUNTRY: USA
ZIP: 10036-2711
COMPUTER READABLE FORM:
MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
ADDRESSE: John H. Runnels
STREET: P. O. Box 2471
CITY: Baton Rouge
STATE: LA
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 18, Application US/09381879
Patent No. 6635740
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Foil, Lane D.
Elzer, Philip H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 100.
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; TOPOLOGY; unknown; MOLECULE TYPE: peptide US-08-912-314A-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 HWSHGWYPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HWSHGWYPG 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: amino acid
STRANDEDNESS: sir
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US-09-381-879-18
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us-09-857-115-6.rai

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Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Schar, Y.
APPLICANT: Rivier, J.
APPLICANT: Rivier, J.
APPLICANT: Rivier, J.
APPLICANT: Scharli, J.
APPLICANT: Gothilf, Y.
TITLE OF INVENTION: Compounds and Methods For Controlling
TITLE OF INVENTION: Reproduction in Fish
NUMBER OF SEQUENCES: 26
CORRESPENDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds
STREET: ILSS Avenue of the Americas
CITY: New York
                                                                                                                                                                                                                                                                                    Length 10;
                                                                                                                                                                                                                                                                                                                               1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
SOFTWARE: PAPELICATION NUMBER: US/08/912,314A
FILING DATE: 08/341,219
FILING DATE: 08/341,219
FILING DATE: 05-DEC-1994
ATTORNEY/AGENT INFORMATION:
                       LOCATION: 1
OTHER INFORMATION: /product= "OTHER"
OTHER INFORMATION: /label= Glul
OTHER INFORMATION: /note= "=pyroglutamic acid"
FEATURE:
                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 90.0%; Pred. No. 0.00089;
Matches 9; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8399-003-999
                                                                                                                                                                         /product= "OTHER"
/label= Gly10
                                                                                                                                                                                                                   /note= "amidated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-912-314A-15; Sequence 15, Application US/08912314A; Patent No. 6210927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO: 15: SEQUENCE CHARACTERISTICS: LENGTH: 10 amin TVDF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: Coruzzi,, Laura A. REGISTRATION NUMBER: 30742 REFERENCE/DOCKET NUMBER: 83 TELECOMMUNICATION INFORMATION: (212) 790-9090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SS: not relevant unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ANTI-SENSE: NO
FEATURE:
NAME/KEY: Modified-site
                                                                                                                              NAME/KEY: Modified-site

COCATION: 10

COTHER INFORMATION: /prod

OTHER INFORMATION: /labe

COTHER INFORMATION: /note

US-08-341-219-15
NAME/KEY: Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: peptide HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                              1 EHWSHGWYPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                         1 EHWSHGWLPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: amino acid
STRANDEDNESS: not
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CITY: New Yo STATE: N.Y. COUNTRY: US/
                                                                                                                                                                                                                                                                                                                                                                                   à
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                                                                                                                                                                                                                                                  NAME/KEY: mat_peptide

LOCATION: Within brain mRNA 121-150, within brain gene 2174-2203.

COTHER INFORMATION: MOD RES substitution of Gly residue at 10 by aza-Gly-NH2, ethylam

OTHER INFORMATION: other Gly amide. Xaa represents D-Arg. MOD_RES Glu at position

COTHER INFORMATION: pyroglutamic acid.
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Fatent No. 5643877
GENERAL INFORMATION:
APPLICANT: Zohar, Y.
APPLICANT: Bowell, J.
APPLICANT: Bowell, J.
APPLICANT: Bowell, W.
APPLICANT: Gothilf, Y.
TITLE OF INVERTION: Reproduction in Fish
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
COTTY No. YORK
                                                                                                                                                                                                                                                                                                                                                                                                      90.4%; Score 66; DB 4; Length 10; 90.0%; Pred. No. 0.00063; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTY: USA

ZIP: 10036-2711
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION NUMBER: US/08/341,219
FILING DATE: 05-DEC-1994
CLASSIFICATION: CO-DEC-1994
ATTORNEY/AGENT INPORMATION:
NAME: COLUZZI, LAURA A.
REGISTRATION NUMBER: 30742
REFERENCE/DOCKET NUMBER: 30742
REFERENCE/DOCKET NUMBER: 3099-003-999
TELECOMMUNICATION INPORMATION:
TELEBEHONE: (212) 790-9900
FILE REFERENCE: P7345.2 (CIP)
CURRENT APPLICATION NUMBER: US/09/941,094C
CURRENT FILING DATE: 1999-10-15
PRIOR APPLICATION NUMBER: US 09/419, 161
PRIOR FILING DATE: 1999-10-15
NUMBER OF SEQ ID NOS: 4
SEQ ID NO 2
LENGTH: 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ILEMETANNE: (212) 869-8864/9741
INFORMATION FOR SEQ ID NO: 15:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        not relevant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 10 amino acids
TYPE: amino acid
STRANDEDRESS: not releva
TOPOLOGY: unknown
MOLECULE TYPE: peptide
HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 90.0
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 EHWSHGWYPG 10
                                                                                                                                                                                    TYPE: Prt
ORGANISM: Gallus gallus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 EHWSHXWYPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HYPOTHETICAL:
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Pred. No. 0.0024;

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100.0%; Fit
             Best Local Similarity 100.
Matches 8; Conservative
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GY: linear
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                                                                    2 HWSHGWYP 9
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                                                                                                        2 HWSHGWYP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-297-989-5
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Pred. No. 0.00089;
                                                                                                                                                                                                                                                         1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: Wabit.....

COUNTRY: USA
ZIP: 20007-5109
ZUP: 20007-5109
ZUP: 20007-5109
COMPUTER EDABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OMPUTER: IBM PC COMPATIBLE
OMPUTER: PRICHION DATA:
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/690,983D
FILING DATE: 25-UNA-1991
CLASSIFICATION DATA:
APPLICATION NUMBER: PCT/AU90/00373
FILING DATE: 24-AUG-1990
ATTORNEY/ARENT INFORMATION:
NAME: BRNT. Stephen A.
REGISTRATION NUMBER: 29.768
REGISTRATION NUMBER: 29.768
REJECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202)672-5300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: Modified-site
LOCATION: 1
OTHER INFORMATION: /note= "Represents pyroglutamic
OTHER INFORMATION: acid"
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ., LOCATION: 10
, OTHER INFORMATION: /note= "Represents glycinamide"
US-07-690-983D-4
                 /product= "OTHER"
/label= Glu1
/note= "=pyroglutamic acid"
                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 4, Application US/07690983D
Patent No. 5403586
GENERAL INFORMATION:
APPLICANT: STWART, Andrew G.
APPLICANT: STWART, ANDREW G.
TITLE OF INVENTION: FUSION PROTEINS
NUMBER OF SEQUENCES: 47
CORRESPONDENCE ADDRESS:
ADDRESSEE: FOLEY & Larcher
STREET: 3000 K Street, N.W.
                                                                                                                           /product= "OTHER"
/label= Gly10
/note= "amidated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE: Foley & Lardner
STREET: 3000 K Street, N.W.
CITY: Washington, D.C.
                                                                                                                                                                                                                      89.08;
90.06;
             OTHER INFORMATION: /produc
OTHER INFORMATION: /label-
OTHER INFORMATION: /label-
ATTURE:
NAME/KEY: Modified-site
LOCATION: 10
OTHER INFORMATION: /produc
OTHER INFORMATION: /label-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10 amino acids
                                                                                                                                                                                                                      Query Match
Best Local Similarity 90.0
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: (202)672-5399
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                 1 EHWSHGWYPG 10
                                                                                                                                                                                                                                                                                                                              1 EHWSHGWLPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: live
                                                                                                                                                                                    US-08-912-314A-15
                                                                                                                                                                                                                                                                                                                                                                                         RESULT 12
US-07-690-983D-4
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DB 1; Length 10;

Score 62;

84.98;

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MESULA 14

RESULA 14

RESULA 150-059-512A-5

RESULA 150-050-512A-5

RESULA 150-050-512A-5
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GENERAL INFORMATION:
APPLICANT: Rivier, J.
APPLICANT: Rivier, J.
APPLICANT: Rivier, J.
APPLICANT: Rivier, J.
APPLICANT: Rowell, J.
APPLICANT: Removed, N.
APPLICANT: Genthif, Y.
TITLE OF INVENTION: Reproduction in Fish
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS: 26
CORRESPONDENCE ADDRESS: 26
CORRESPONDENCE ADDRESS: Remove of the Americas
STREET: 1155 Avenue of the Americas
CITY: New York
STREET: N.Y.
COMPUTER: READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
COMPUTER: IBM PC Compatible
COMPUTER: BENEVILL Release #1.0, Version #1.30
CURRAING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRAIN APPLICATION DATA:
APPLICATION NUMBER: US/30/314A
APPLICATION NUMBER: US/314, 219
FILING DATE: 05-DEC-194
ATTORNEY/AGENT INFORMATION:
NAME: CO-UZZI, Laura A.
REFERENCE/DOCKET NUMBER: 30742
                                                                                                                                                                                                                                                                                                                                             NAME/KEY: Modified-site
LOCATION: 1
LOCATION: 1
OTHER INFORMATION: /product= "OTHER"
OTHER INFORMATION: /label= Glul
OTHER INFORMATION: /note= "=pyroglutamic acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /product= "OTHBR"
/label= Gly10
/note= "amidated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 14, Application US/08912314A Patent No. 6210927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
NAME/KEY: Modified-site
LOCATION: 10
OTHER INFORMATION: /produc
OTHER INFORMATION: /label
OTHER INFORMATION: /label
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 EHWSHGWYPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 EHWSYGWLPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-912-314A-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-08-341-219-14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CENTERLY INFOGRATION:
APPLICANT: Zohar, Y.
APPLICANT: Rivier, J.
APPLICANT: Reveal, J.
APPLICANT: Bowell, J.
APPLICANT: Berwood, N.
APPLICANT: Gochilf, Y.
TITLE OF INVENTION: Compounds and Methods For Controlling
TITLE OF INVENTION: Reproduction in Fish
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
STATE: N.Y.
COUNTRY: USA
ZIP: 10036-2711
COMPUTER: READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: BM PC compatible
COMPUTER: BM PC compatible
OPERATION SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/341,219
FILING DATE: 05-DEC-1994
CLASSIFICATION: 5-14
                                   STATES

STATES

COUNTRY: USA

ZIP: 70821-2471

COMPUTER READSLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PACHELIN Release #1.0, Version #1.25;
SOFTWARE: WordPerfect 5.1; No. 6407205epad Version 4.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/297,989
FILING DATE:
CLASSIFICATION NUMBER: 33451
REGISTRATION NUMBER: 33451
REFERENCE/DOCKET INFORMATION:
TELEPHONE: (225) 346-8049
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 anino acid
TYPE: amino acid
TYPE: amino acid
TYPE: peptide
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     84.9%; Score 62; DB 4; Length 10; 100.0%; Pred. No. 0.0024; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OTHER INFORMATION: /note= "Xaa at 1 is pyro-Glu; Xaa OTHER INFORMATION: at 10 is Gly-NH2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 14, Application US/08341219
Patent No. 5643877
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NTTORNEY/AGENT INFORMATION:
NAME: Coruzzi,, Laura A.
REGISTRATION NUMBER: 30742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity 100.
Matches 8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 HWSHGWYP 9
Baton Rouge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 HWSHGWYP 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 15
US-08-341-219-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-297-989-5
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Gaps
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Best Local Similarity 80.0%; Pred. No. 0.0066;

Matches 8; Conservative 1; Mismatches 1; Indels
         8399-003-999
REFERENCE/DOCKET NUMBER: 8399-C
TELECOMMUNICATION INFORMATION:
TELEPAK: (212) 869-8864/9741
INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
TYPE: amino acid
STRANDENSES: not relevant
TOPOLOGY: unknown
MOLECULE TYPE: peptide
HYPOTHETICAL: NO
ANTI-SENSE: NO
FEATURE:
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Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 17, Application US/08912314A

Sequence 17, Application US/08912314A

PATENT NO. 6210927

APPLICANT: Zohar, Y.
APPLICANT: Powell, J.
APPLICANT: Sherwood, N.
APPLICANT: Gerhiff, Y.
TITLE OF INVENTION: Reproduction in Fish
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 57; DB 1; Length 10;
Pred. No. 0.013;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER: REPORT disk
COMPUTER: INDEPD disk
COMPUTER: INDEPD DISCOMDATIBLE
COMPUTER: INDEPD COMDATIBLE
COMPUTER: INDEPD COMDATIBLE
COURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/912,314A
FILING DATE: 30-UN-1997
CLASSIFICATION: 514
PRIOR APPLICATION NUMBER: 08/341,219
APPLICATION NUMBER: 08/341,219
APPLICATION NUMBER: 08/341,219
APPLICATION NUMBER: 08/341,219
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                         /product= "OTHER"
/label= Glu1
/note= "=pyroglutamic acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: COTUZZI, LAUTA A.
REGISTRATION NUMBER: 30742
REFERENCE/DOCKET NUMBER: 8399-003-999
TELEPHONE: (212) 790-9090
TELEPHONE: (212) 790-9090
TELEPAK: (212) 869-8864/9741
INFORMATION FOR EEQ ID NO: 17:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
STATE: N.Y.
COUNTRY: USA
ZIP: 10036-2711
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                          /product= "OTHER"
/label= Gly10
/note= "amidated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               not relevant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 78.1%;
Best Local Similarity 80.0%;
Matches 8; Conservative (
                                                                                                              HYPOTHETICAL: NO FATURE: NO FRATURE: NO FRATURE: NO CATION: 1 LOCATION: 1 OTHER INFORMATION: /produce other Information: /label.
                                                                                                                                                                                                                                                                                                                                                    FEATURE:
NAME/KEY: Modified-site
LOCATION: 10
OTHER INFORMATION: /produ
OTHER INFORMATION: /label
                                                     TOPOLOGY: unknown
MOLECULE TYPE: peptide
HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 EHWSHGWYPG 10
amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-912-314A-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-08-341-219-17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Zohar, Y.
APPLICANT: Rivier, J.
APPLICANT: Revier, J.
APPLICANT: Powell, J.
APPLICANT: Serveded, N.
APPLICANT: Gothilf, Y.
TITLE OF INVENTION: Compounds and Methods For Controlling
TITLE OF INVENTION: Reproduction in Fish
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  80.8%; Score 59; DB 3; Length 10; 80.0%; Pred. No. 0.0066; tive 1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY: USA

CONFITE: N 1.

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPOTER: IBM PC compatible
COMPOTER: IBM PC compatible
COMPOTER: IBM PC compatible
COMPOTER: IBM PC compatible
COMPOTER: PATENTIN Release #1.0, Version #1.30
SOFTWARE: PATENTIN DATA:
APPLICATION NUMBER: US/08/341,219
FILING DATE: 05-DEC-1994
ATTONEY/AGENT INFORMATION:
NAME: CCHUZZi, LAURA A
REGISTRATION NUMBER: 30742
REFERRNCE/POCKET NUMBER: 3399-003-999
TELECOMMUNICATION INFORMATION:
TELEFRAM: (212) 790-9090
TELEFRAM: (212) 790-9090
TELEFRAM: (212) 869-8864/9741
INFORMATION FOR SEQ ID NO: 17:
SEQUENCE CHARACTERISTICS:
COMPATION CALLAGE
AND COMPATION TO MINIOR CALLAGE
SEQUENCE CHARACTERISTICS:
COMPATION CALLAGE
AND COMPATION CALLAGE
AND COMPATION CALLAGE
AND CALL
                                                                                                                                                                                                                                                                                                                                                                                                                       /product= "OTHER"
/label= Glu1
/note= "=pyroglutamic acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /product= "OTHER"
/label= Gly10
/note= "amidated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   UDRESSEE: Pennie & Edmonds
PTREET: 1155 Avenue of the Americas
IIIY: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; Sequence 17, Application US/08341219
; Patent No. 5643877
                                     TELEFAX: (212) 869-8864/9741
INPORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
                                                                                                                                                 TYPE: amino acid
STRANDEDNESS: not relevant
TOPOLOGY: unknown
MOLECULE TYPE: peptide
HYPOTHETICAL: NO
ANTI-SENSE: NO
FEATURE:
NAME/KEY: Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: Modified-site
LOCATION: 10
COTHER INFORMATION: /produc
COTHER INFORMATION: /label=
COTHER INFORMATION: /label=
US-08-912-314A-14
         (212) 790-9090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 80.0
Matches 8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 EHWSHGWYPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCATION: 1
OTHER INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
APPLICANT: Zohar,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STATE: N.Y. COUNTRY: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 17
US-08-341-219-17
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Gaps
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Patent No. 6210927

GENERAL INFORMATION:
APPLICANT: Schar, Y.
APPLICANT: Shewell, J.
APPLICANT: Shewell, J.
APPLICANT: Shewell, Y.
TITLE OF INVENTION: Compounds and Methods For Controlling
TITLE OF INVENTION: Reproduction in Fish
NUMBER OF SEQUENCE: 26
CORRESPONDENCE ADDRESS:
               Length 90;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 3; Length 90;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1; Indels
                                                 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTY:

COUNTY:

COUNTY:

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/912,314A
FILING DATE: 30-UM-1997
CLASSIFICATION NUMBER: US/08/912,314A
PRIOR APPLICATION NUMBER: 08/341,219
FILING DATE: 05-DEC-1994
ATTONENTY/AGENT INFORMATION:
NAME: COLUZZi, Laura A.
REGISTRATION NUMBER: 30742
RELEPHONE: (212) 790-9090
TELEFRAN: (212) 790-9090
TELEFRAN: (212) 790-9090
TELEFRAN: (212) 790-9090
TELEFRAN: (212) 869-864/9741
INFORMATION FOR SEQ ID NO: 24:
SEQUENCE CHARACTERISTICS:
LEMOTH: 90 main acids
             Score 56; DB 1;
Pred. No. 0.17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 56; DB 3;
Pred. No. 0.17;
2; Mismatches
                                                 2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                       SSEE: Pennie & Edmonds
7: 1155 Avenue of the Americas
New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 21
US-08-242-678D-8
'Sequence 8, Application US/08242678D
'Patent No. 5760000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        not relevant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                76.7%;
             Query Match
Best Local Similarity 70.0%;
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 76.7
Best Local Similarity 70.0
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: peptide HYPOTHETICAL: NO
                                                                                   1 EHWSHGWYPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 EHWSHGWYPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24 QHWSYGWLPG 33
                                                                                                                      24 OHWSYGWLPG 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: amino acid STRANDEDNESS: not
                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE:
STREET: 115
CITY: New Y.
STATE: N.Y.
COUNTRY: US.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; ANTI-SENSE:
US-08-912-314A-24
                                                                                                                                                                           RESULT 20
US-08-912-314A-24
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APPLICANT: Rivier, J.
APPLICANT: Rivier, J.
APPLICANT: Sherwood, N.
APPLICANT: Gothilf, Y.
TITLE OF INVENTION: Compounds and Methods For Controlling
TITLE OF INVENTION: Reproduction in Fish
NUMBER OF SEQUENCES: 26
ADDRESSES: Pennie & Edmonds
                                                                                                                                                                                                                                                                                                                    78.1%; Score 57; DB 3; Length 10; 80.0%; Pred. No. 0.013;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note= "=pyroglutamic acid"
                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
         MOLECULE TYPE: peptide
HYPOTHETICAL: NO
ANTI-SENSE: NO
FRATURE:
NAME/KEX: Modified-site
LOCATION: 1
OTHER INFORMATION: /label= Glul
OTHER INFORMATION: /label= Glul
OTHER INFORMATION: /note= "epyrcglutami
FEATURE:
NAME/KEY: Modified-site
LOCATION: 10
OTHER INFORMATION: /product= "OTHER"
OTHER INFORMATION: /habel= Gly10
OTHER INFORMATION: /label= Gly10
OTHER INFORMATION: /habel= Gly10
OTHER INFORMATION: /note= "amidated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STREET: 1155 Avenue of the Americas CITY: New York STREE N.Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sequence 24, Application US/08341219
patent No. 5643877
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                     Best Local Similarity 80.0
Matches 8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY: USA
ZIP: 10036-2711
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE: peptide HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                           1 EHWSHGWYPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                             EHWSHDWKPG 10
unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           unknown
                                                                                                                                                                                                                                                                                    US-08-912-314A-17
TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 19
US-08-341-219-24
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Sequence 4, Application US/09941094C

Patent No. 6635739
GENERAL INFORMATION:
TATLE OF INVENTION:
TILLE OF INVENTION:
TILLE OF INVENTION:
PRICE REFERENCE:
PRICE APPLICATION NUMBER: US/09/941,094C
CURRENT FILING DATE: 1999-10-15
PRICE APPLICATION NUMBER: US 09/419, 161
PRICE TILING DATE: 1999-10-15
NUMBER OF SEQ ID NOS: 4
ESCOID NO 4
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                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: La. State Univ. & Mech. Coll., Board of Supervisors Enright, Frederick M.
Baright, Frederick M.
Hansel, William
Koonce, Kenneth L.
McCann, Samuel M.
Yu, Wen H.
Pelrican P.
Foil, Lane D.
Elzer, Philip H.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             71.2%; Score 52; DB 4; Length 10; 70.0%; Pred. No. 0.069; 2; Indels tive 1; Mismatches 2; Indels
                                                                              1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: John H. Runnels
STREET: P. O. Box 2471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 16, Application US/09381879
Patent No. 6635740
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ZIP: 70821-2471
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                     Query Match
Best Local Similarity 70.0%;
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: Baton Rouge
STATE: LA
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity 70.0
Matches 7; Conservative
                                                                                                                                                1 EHWSHGWYPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 EHWSHGWYPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 EHWSYXWLPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: Prt
ORGANISM: Salmo salar
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-381-879-16
                                                                                                                                                                                                                          RESULT 23
US-09-941-094C-4
US-09-419-161-4
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US-09-419-161-4
US-09-419-161-4
US-09-419-161-4
US-09-419-161-4
US-09-419-161-4
US-09-419-161-4
US-09-419-161-4
US-09-419-161-5
Patent No. 6323179
GENERAL INFORMATION:
TITLE OF INVENTION: Fertility and Pregnancy
TITLE OF INVENTION: Fertility and Pregnancy
FILE REPRENCE: P73-45-2
CURRENT APPLICATION NUMBER: US/09/419,161
CURRENT PILING DATE: 1999-10-15
SEQ ID NO 4
SEQ ID NOS: 4
SEQ ID NO 4
ILENGTH: 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: mat_peptide
LOCATION: unknown
OTHER INFORMATION: MOD_RES substitution of Gly residue at 10 with -aza-Gly-NH2.
OTHER INFORMATION: Xaa represents D-Arg.MOD_RES Glu at position 1 is
OTHER INFORMATION: pyroglutamic acid.
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               APPLICANT: HABIBI, Hamid R.
TITLE OF INVENTION: INHIBITION OF LIVER CANCER BY THE USE OF ITILE OF INVENTION: GNRH AND GNRH ANALOGS
OCRRESPONDENCE: 12
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; LOCATION: 1
; COTHER INFORMATION: /label= Aal
; OTHER INFORMATION: /note= "Aal is PYROGLUTAMIC ACID'
US-08-242-678D-8
                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUW TYPE: Floppy disk
MEDIUW TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM:
FC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/242,678D
FILING DATE: 13-MAY-1994
ATTONEY/AGENT INPOMMATION:
NAME: Dadio, Susan M.
REGISTRATION NUMBER: 40,373
REFERENCE/DOCKET NUMBER: 028722-103
FELEPHONE: (703) 836-6520
TELEFRA: (703) 836-6221
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
'THOMATH: 10 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    74.0%; Score 54; DB 1;
77.8%; Pred. No. 0.035;
Live 1; Mismatches
                                                                                                                   ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS STREET: P.O. Box 1404
CITY: Alexandria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: Modified-site
                                                                                                                                                                              STATE: Virginia
COUNTRY: United States
ZIP: 22313-1404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 10 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 77.8
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HWSHGWYPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: Prt
ORGANISM: Salmon GnRH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7
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Patent No. 5643877;
GENERAL INFORMATION:
APPLICANT: RAVIET, J.
APPLICANT: RAVIET, J.
APPLICANT: Rowell, J.
APPLICANT: Gothilf, Y.
TITLE OF INVENTION: Compounds and Methods For Controlling;
TITLE OF INVENTION: Reproduction in Fish
NUMBER OF SEQUENCE: 26
CORRESPONDENCE ADDRESS:
ADDRESSES: Pennie & Edminds
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                          71.2%; Score 52; DB 4; Length 33; 77.8%; Pred. No. 0.23; 2; Indels tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STATE: N.Y.
COUNTRY: USA
ZIP: 10036-2711
COMPUTER: ERADABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/341,219
FILING DATE: 05-DEC-1994
CLASSIFICATION: 514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8399-003-999
                                     TELECOMMUNICATION INFORMATION:
TELEPHONE: (225) 346-8049
INFORMATION FOR SEQ ID NO: 15:
SEQUENCE CHARACTERISTICS:
LENGTH: 33 amino acids
REGISTRATION NUMBER: 33
REFERENCE/DOCKET NUMBER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTORNEY/AGENT INFORMATION:
NAME: Coruzzi,, Laura A.
REGIESTRATION NUMBER: 30742
REFERENCE/DOCKET NUMBER: 8395
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX: (212) 869-8864/9741
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
TYPE: amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEE: Pennie & Edmonds
: 1155 Avenue of the New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRANDEDNESS: not relevant
                                                                                                                                                                              TOPOLOGY: linear MOLECULE TYPE: peptide
                                                                                                                                                               TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                            Ouery Match 71.2
Best Local Similarity 77.6
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE: peptide HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 HWSHGWYPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: La. State Univ. & Mech. Coll., Board of Supervisors
Enright, Frederick M.
Barynes, Jesse M.
Hansel, William
Koonce, Kenneth L.
McCann, Samuel M.
Yu, Wen H.
Melrose, Patricia A.
Foil, Lane D.
Elzer, Philip H.
                                                                                                                                                                                                                                                                                                                                                                                                                                               yzo-glutamic acid. This sequence is 1-LHRH-III." SEQUENCE DESCRIPTION: SEQ ID NO: 16:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: Ligand/Lytic Peptide Compositions and Methods of Use
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 52; DB 4; Length 10;
Pred. No. 0.069;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
COMPUTER: IBM PC compatible
COMPRATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/381,879
FILING DATE: 25-Aug-1999
CLASSIFICATION: «Unknown»
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                        NAME: Runnels, John H.
REGISTRATION NUMBER: 33,451
REFERENCE/DOCKET NUMBER: 96A3.2-US
TELECOMUNICATION INFORMATION:
TELEPHONE: (225) 387-321
TELEFAX: (225) 386-8049
INFORMATION FOR SEQ ID NO: 16:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
TYPE: amino acids
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION DATA:
REPLICATION NUMBER: US/09/381,879
FILING DATE: 25-Aug-1999
CLASSIFICATION: <UNKNOWN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
ADDRESSEE: John H. Runnels
STREET: P. O. Box 2471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-381-879-15; Sequence 15, Application US/09381879; Patent No. 6635740
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Runnels, John H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              71.2%;
77.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CITY: Baton Rouge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 77.8
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 HWSHGWYPG 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STATE: LA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSER: Foley & Lardner
STREET: 3000 K Street, N.W.
CUTY: Washington, D.C.
COUNTRY: USA
ZIP: 20007-5109
COMPUTER READABLE FORM:
MEDIUW TYPE: Floppy disk
COMPUTER: BIM PC compatible DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/690,983D
FILING DATE: 25-JUN-1991
CLASSIFICATION DATA:
APPLICATION NUMBER: PCT/AU90/00373
FILING DATE: 24-AUG-1990
ATTORNEY AGENT INFORMATION:
NAME: BENT, Stephen A.
REGISTRATION NUMBER: 29,768
REFERENCE/DOCKET NUMBER: 16786/148 CHAC
TELECOMMUNICATION NUMBER: 16786/148 CHAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCATION: 10
CTHER INFORMATION: /note= "Represents glycinamide"
U3-07-690-983D-5
                    LOCATION: 1
OTHER INFORMATION: /product= "OTHER"
OTHER INFORMATION: /label= Glul
OTHER INFORMATION: /note= "=pyroglutamic acid"
FEATURE:
NAME/KEY: Modified-site
LOCATION: 10
OTHER INFORMATION: /product= "OTHER"
OTHER INFORMATION: /label= Gly10
OTHER INFORMATION: /note= "amidated"
                                                                                                                                                                                                                                                                                                                                                                                                       Score 51; DB 3;
Pred. No. 0.097;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 5, Application US/07690983D
Patent No. 5403586
GENERAL INFORMATION:
APPLICANT: RUSSELL-JONES, Gregory J. APPLICANT: TSUNIS, Con G. TITLE OF INVENTION: PUSION PROTEINS NUMBER OF SEQUENCES:
ADDRESPONDENCE ADDRESS:
ADDRESSEE: FOLEY & Lardner
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: Modified-site
LOCATION: 1
OTHER INFORMATION: /note=
OTHER INFORMATION: acid"
                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 80.0%;
Matches 8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEGRAX: (2020672-539)
INFORMATION FOR SEQ ID NO: 5
SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
TYPE: amino acid
TYPE: 1inear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE: Nodified-site
Modified-site
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 EHWSHGWYPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 EHWSHGLNPG 10
                                                                                                                                                                                                                                                                                                                                           US-08-912-314A-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 28
US-07-690-983D-5
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APPLICANT: Zohar, Y.
APPLICANT: Powell, J.
APPLICANT: Powell, J.
APPLICANT: Generated, J.
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 51; DB 1; Length 10;
Pred. No. 0.097;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STATE: N.Y.
COUNTRY: USA
ZIP: 10036-2711
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/912,314A
FILING DATE: 30-JUN-1997
CLASSIFICATION: 514
PRIOR APPLICATION NUMBER: 08/341,219
FILING DATE: 05-DEC-1994
ATTORNEY AGENT INFORMATION:
NAME: COATAZI, LAURA A.
                                                                                                                        /product= "OTHER"
/label= Glu1
/note= "=pyroglutamic acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: COTUZZI, LAURA A.
REGISTRATION NUMBER: 30742
REFERENCE/DOCKET NUMBER: 8399-003-999
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEPHONE: (212) 869-864/9741
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                            /product= "OTHER"
/label= Gly10
/note= "amidated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ISEE: Pennie & Edmonds
1: 1155 Avenue of the Americas
New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 13, Application US/08912314A Patent No. 6210927
                                              FAGATORE:
NAME/KEY: Modified-site
LOCATION: 1
OTHER INFORMATION: /produc
OTHER INFORMATION: /label-
FEATURE:
NAME/KEY: Modified-site
LOCATION: 10
OTHER INFORMATION: /produc
OTHER INFORMATION: /produc
OTHER INFORMATION: /label-
OTHER INFORMATION: /label-
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 80.0
Matches 8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: peptide HYPOTHETICAL: NO ANTI-SENSE: NO FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 EHWSHGWYPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EHWSHGLNPG 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: amino acid STRANDEDNESS: no
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE:
STREET: 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-08-912-314A-13
NNTI-SENSE:
                                                                                                                                                                                                                                                                                                                                                                                                          US-08-341-219-13
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APPLICANT: Zohar, Y.
APPLICANT: Rivier, J.
APPLICANT: Bretanod, N.
APPLICANT: Bretanod, N.
APPLICANT: Bretanod, N.
APPLICANT: Gothilf, Y.
TITLE OF INVENTION: Compounds and Methods For Controlling
TITLE OF INVENTION: Reproduction in Fish
NUMBER OF SEQUENCES: 26
CORRESSED: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
STREET: 1155 Avenue of the Americas
CITY: New York
STREET: 1030 Avenue of the Americas
COUNTRY: USA
ZIP: 10036-2711
COUNTRY: USA
ZIP: 10036-2711
COUNTRY: PC-DOS/MS-DOS
SOFTWARE: PRADABLE FORM:
MEDIUM TYPE: Floppy disk
COUNTRY: PRADABLE FORM:
MEDIUM TYPE: PROMETIN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/341,219
FILING DATE: 05-DEC-1994
                                                                                       COUNTRY: USA

ZIP: 70621-241

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25;
SOFTWARE: Wordberfect 5.1; No. 6407205epad Version 4.0
CURRENT APPLICATION NUMBER: US/09/297,989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   65.8%; Score 48; DB 4; Length 10; 75.0%; Pred. No. 0.26; 1; Indels tive 1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OTHER INFORMATION: /note= "Xaa at 1 is pyro-Glu; Xaa
OTHER INFORMATION: at 10 is Gly-NH2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 23, Application US/08341219
Patent No. 5643877
                                                                                                                                                                                                                                                                                                          APPLICATION.
FILING DATE:
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: RULINES, JOHN IN REGISTRATION NUMBER: 33451
REGISTRATION NUMBER: 3751
TELECOMMUNICATION INFORMATION:
TELEPHONE: (225) 346-8049
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
TELENTE: Amino acids
TELENTE: Amino acids
ADDRESSEE: John H. Runnels
STREET: P. O. Box 2471
CITY: Baton Rouge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity
Matches 6; Conserve
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 HWSHGWYP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 HWSYGWLP
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COMPUTRY: CAN

ZIP: 70821-2471

ZIP: 70821-2471

ZIP: 70821-2471

COMPUTRY: READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTRE: IBM PC Compatible
COMPUTRE: IBM PC Compatible
COMPUTRE: DATEN: PC-DOS/MS-DOS
SOFTWARE: Worderfect 5.1, No. 630471epad Version 4.0
SOFTWARE: Worderfect 5.1, No. 630471epad Version 4.0
CURRENT APPLICATION DATA: 1059/089,522A
FILING DATE: 1058-06-03
FILENGUENC FORCET NUMBER: 33451
REFERENCE/DOCKET NUMBER: 33451
REFERENCE/DOCKET NUMBER: 33451
FELEPHONE: (225) 346-049
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: ACTURE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               65.8%; Score 48; DB 4; Length 10; 75.0%; Pred. No. 0.26;
                         DB 1; Length 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; OTHER INFORMATION: /note= "Xaa at 1 is pyro-Glu; Xaa; OTHER INFORMATION: at 10 is Gly-NH2" US-09-089-522A-4
                                                                                                                                                                                                                                                                                Sequence 4, Application US/09089522A
Patent No. 6300471
GENERAL INFORMATION:
APPLICANT: WG Wen H.
TITLE OF INVENTION: FSH-Releasing Peptides
NUMBER OF SEQUENCES: 41
CORRESPONDENCE ADDRESS:
ADDRESSEE: John H. Runnels
STREET: P. O. Box 2471
CITY: Baton Rouge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-297-989-4

Sequence 4, Application US/09297989

Patent No. 6407205

CENERAL INFORMATION:

APPLICANT: McCann, Samuel M.

APPLICANT: Yu, Wen H.

ITILE OF INVENTION: FSH-Releasing Peptides

UMMBER OF SEQUENCES: 41

CORRESPONDENCE ADDRESS:
                            65.8%;
75.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 65.8
Best Local Similarity 75.0
Matches 6; Conservative
                       Query Match
Best Local Similarity 75.0
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 HWSHGWYP 9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STATE: LA
COUNTRY: LA
COUNTRY: LA
ZIP: 70821-2471
ZIP: 70821-2471
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
COMPUTER: TBM PC Compatible
COMPUTER: Wordferfect
SOFTWARE: Wardferfect
SOFTW
                                                                                                Score 48; DB 3; Length 80; Pred. No. 2.2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           64.4%; Score 47; DB 4; Length 10; 75.0%; Pred. No. 0.37; 2; Indels ive 0; Mismatches 2; Indels
                                                                                                                                                            Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 7, Application US/09089522A
Patent No. 6306471
GENERAL INFORMATION:
APPLICANT: McCann, Samuel M.
APPLICANT: YU, Wen H.
TITLE OF INVENTION: FSH-Releasing Peptides
NUMBER OF SEQUENCES: 41
CORRESPONDENCE ADDRESS:
ADDRESSEE: John H. Runnels
STREET: P. O. Box 2471
CITY: Baton Rouge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
APPLICANT: MCCann., Samuel M.
APPLICANT: Yu, Wen H.
TITLE OF INVENTION: FSH-Releasing Peptides
                                                                                                                                                            1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 7, Application US/09297989
Patent No. 6407205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
NAME: Runnels, John H.
REGISTRATION NUMBER: 3451
REFRENCE/POCKET NUMBER: 97
TELECOMMUNICATION INFORMATION:
                                                                                                   65.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 : (225) 387-3221
(225) 346-8049
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INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acida
                                                                                            Query Match
Best Local Similarity 70.0
Matches 7; Conservative
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Best Local Similarity 75.0
Matches 6; Conservative
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22 OHWSHGLNPG 31
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GY: linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION:
                2
            ; ANTI-SENSE:
US-08-912-314A-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-089-522A-7
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US-09-297-989-7
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APPLICANT: Rivier, J.
APPLICANT: Rivier, J.
APPLICANT: Sherwood, N.
APPLICANT: Sherwood, N.
APPLICANT: Gothilf, Y.
APPLICANT: Gothilf, Y.
APPLICANT: Gothilf, Y.
APPLICANT: Servicon: Zohounds and Methods For Controlling TITLE OF INVENTION: Compounds and Methods For Controlling TITLE OF INVENTION: Reproduction in Fish
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 80;
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPRIATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/912,314A
FILING DATE: 30-JUN-1997
CLASSIFICATION: 514
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CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: 08/341,219
FILING DATE: 05-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Coruzzi,, Laura A.
REGISTRATION NUMBER: 30742
REFERENCE/DOCKEY NUMBER: 30742
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1; Mismatches
                                                                   8399-003-999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 48;
Pred. No. 2
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STREET: 1155 Avenue of the Americas
CIIY: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-912-314A-23
; Sequence 23, Application US/08912314A
; Patent No. 6210927
NAME: Coruzzi, Laura A.
REGISTRATION NUMBER: 30742
REFERENCE/DOCKET NUMBER: 8399-(
TELECOMMUNICATION INFORMATION:
TELEFAN: (212) 790-9090
TELEFAN: (212) 869-864/9741
INFORMATION FOR SEQ ID NO: 23:
SEQUENCE CHARACTERISTICS:
LENGTH: 80 amino acids
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INFORMATION FOR SEQ ID NO: 23:
SEQUENCE CHARACTERISTICS:
LENGTH: 80 amino acids
                                                                                                                                                                                                                                                                                                   SS: not relevant
unknown
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                7; Conservative
                                                                                                                                                                                                                                                                                                                   Simeral
TOPOLOGY: unknown
MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 EHWSHGWYPG 10
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22 QHWSHGLNPG 31
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                                                                                                                                                                                                                                                                             TYPE: amino acid
STRANDEDNESS: no
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Best Local Similarity
Matches 7; Conserv
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ZIP: 10036-2711
                                                                                                                                                                                                                                                                                                                                                                                                HYPOTHETICAL: N
; ANTI-SENSE: NO
US-08-341-219-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRANDEDNESS:
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Sequence 9, Application US/0824267BD
Patent No. 5760000
GENERAL INFORMATION:
APPLICANT: HABIBI, Hamid R.
TITLE OF INVENTION: INHIBITION OF LIVER CANCER BY THE USE OF TITLE OF INVENTION: GNRH AND GNRH ANALOGS
NUMBER OF SEQUENCES: 12
CORRESPONDENCE ADDRESS:
ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS
STREET: PO. Box 1404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         63.0%; Score 46; DB 1; Length 10; 70.0%; Pred. No. 0.52; 2; Indels iive 1; Mismatches 2; Indels
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CITY: Alexandria a STATE: Virginia SID: 2213-1404

COMPUTER READABLE FORM: MEDIUM TYPE: RADABLE FORM: PC-DOS/MS-DOS SOFTWARE: BATENTIN Release #1.0, Version #1.30 SOFTWARE: Patentin Release #1.0, Version #1.30 SOFTWARE: Patentin Release #1.0, Version #1.30 SOFTWARE: 13-MAY-1994

CURRENT PAPLICATION NUMBER: US/08/242,678D

FILING DATE: 13-MAY-1994

CLASSIFICATION: 514

ATTORNEY/AGBNT INFORMATION: NAME: Dadio, Susan M. REGISTRATION NUMBER: 028722-103

TELEPHONE: (703) 836-620

TELEPHONE: (703) 836-620

TELEPHONE: (703) 836-620

TELEPHONE: (703) 836-2021

INFORMATION FOR SEQ ID NO: 9:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /product= "OTHER"
/label= Glu1
/note= "=pyroglutamic acid"
CLASSIFICATION: 514
ATTOREX/AGENT INFORMATION:
NAME: Coruzzi, Laura A.
REGISTRATION NUMBER: 30742
REFRERENCE FOOKET UNDHER: 8199-003-999
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFRAX: (212) 790-9090
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
TYPE: amino acid
STRANDENDESS: not relevant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /product= "OTHER"
/label= Gly10
/note= "amidated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HYPOTHETICAL: NO PARTI-SENSE: NO PEATURE: NO PEATURE: NO CATTOR: 1 LOCATION: 1 OTHER INFORMATION: /label-OTHER INFORMATION
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NAME/KEY: Modified-site
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Best Local Similarity 70.0
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: unknown
MOLECULE TYPE: peptide
HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 EHWSHGWYPG 10
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OTHER INFORMATION:
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US-08-242-678D-9
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                                                                                                                                                                                                                     COUNTRY: USA
COUNTRY: USA
COUNTRY: USA
CONTUTER READABLE FORM:
MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WordPerfect 5.1; No. 6407205epad Version 4.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/297,989
FILING DATE:
CLASSIFICATION 514
ATTORNEY/ADENT INFORMATION:
NAME: Runnels, John H.
REGISTRATION NUMBER: 33451
REFERENCE FOOCKET WINGHER: 9703P-US
TELEPHONE: (225) 346-8049
INFORMATION FOR SEG ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
"VPE: amino acid
"The armino acids
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"The amino acids The armino acids The amino acids The
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APPLICANT: Echar, Y.
APPLICANT: Rivier, J.
APPLICANT: Gener, J.
APPLICANT: General, J.
APPLIC
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ZIP: 10036-2711
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/341,219
FILING DATE: 05-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET: 1155 Avenue of the Americas CITY: New York
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US-08-341-219-12
; Sequence 12, Application US/08341219
; Parent No. 5643877
NUMBER OF SEQUENCES: 41
CORRESPONDENCE ADDRESS:
ADDRESSEE: John H. Runnels
STREET: P. O. Box 2471
CITY: Baton Rouge
STATE: LA
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Best Local Similarity
Matches 6; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
APPLICANT: MCCann, Samuel M.
APPLICANT: Yu, Wen H.
TITLE OF INVENTION: FSH-Releasing Peptides
NUMBER OF ENGUENCES: 41
COMPRESSED JOHN H. Runnels
STREE: P. O. Box 2471
CITY: Baton Rouge
STATE: LA
COMPUTRY: LBA
COMPUTRY: IBM PC compatible
COMPUTRY: Exabable FORM:
MEDIUM TYPE: Rloppy disk
COMPUTRY: Baton Rouge
STATE: LA
COMPUTRY: LBM PC compatible
COMPUTRY: Baton Rouge
STATE: LBM PC compatible
COMPUTRY: Baton Rouge
STATE: LA
COMPUTRY: LBM PC compatible
COMPUTRY: Baton Rouge
STATE: LBM PC compatible
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                                                                                                                                                                                                                                                                                                                                   63.0%; Score 46; DB 3; Length 10; 70.0%; Pred. No. 0.52; ive 1; Mismatches 2; Indels
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      /product= "OTHER"
/label= Glu1
/note= "=pyroglutamic acid"
) OTHER INFORMATION: /product= "OTHER"
) OTHER INFORMATION: /label= Glu1
OTHER INFORMATION: /hote= "=pyroglutami,
) NAME/KES: Modified-site
) LOCATION: 10
) OTHER INFORMATION: /product= "OTHER"
) OTHER INFORMATION: /label= Gly10
) OTHER INFORMATION: /label= Gly10
US-08-912-314A-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 1, Application US/09089522A
Patent No. 6300471
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 75.0
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity 70.0
Matches 7; Conservative
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TOPOLOGY: linear
MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 EHWSHGWYPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 EHWSYGLOPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 HWSHDWKP 9
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Patent No. 6210927
GENERAL INFORMATION:
APPLICANT: Zohar, Y.
APPLICANT: Powell, J.
APPLICANT: Bowell, J.
APPLICANT: Gothilf, Y.
TITLE OF INVENTION: Compounds and Methods For Controlling TITLE OF INVENTION: Reproduction in Fish
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                               Length 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           2; Indels
                                                                                                                                                                                                                                          LOCATION: 1
OTHER INFORMATION: /label= AA1
OTHER INFORMATION: /note= "AA1 is PYROGLUTAMIC ACID"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPOTER: IBM PC compatible

COMPOTER: BATCOMIN RELEASE #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/912,314A

FILING DATE: 30-01W-1997

CLASSITCATION: 514

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/341,219

FILING DATE: 05-DEC-1994

ATTOMNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                            Score 46; DB 1;
Pred. No. 0.52;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: COLUZZI, LEMLE A.
REGISTRATION NUMBER: 30742
REFERENCE/DOCKET NUMBER: 8399-003-999
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9030
TELEPHONE: (212) 869-864/9741
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SSEE: Pennie & Edmonds
F: 1155 Avenue of the Americas
New York
                                                                                                                                                                                                                                                                                                                                                                                        Query Match 63.0%; Scc
Best Local Similarity 77.8%; Pre
Matches 7; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: amino acid
STRANDEDNESS: not relevant
TOPOLOGY: unknown
                                                                                                                                                                                                             NAME/KEY: Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10 amino acids
      SEQUENCE CHARACTERISTICS LENGTH: 10 amino acide
                                                               TYPE: amino acid
STRANDEDNESS: single
                                                                                                                           TOPOLOGY: linear MOLECULE TYPE: protein FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: peptide
HYPOTHETICAL: NO
ANTI-SENSE: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 HWSHGWYPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HWSHGLNPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 37
US-08-912-314A-12
                                                                                                                                                                                                                                                                                                                                   US-08-242-678D-9
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; OTHER INFORMATION: /note= "Xaa at 1 is pyro-Glu; ; OTHER INFORMATION: Xaa at 6 is (D-Leu); Xaa at 10 is Gly-NH2" US-09-089-522A-13
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ZIP: 70821-2471
COUNTRY: USA

ZIP: 70821-2471
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.25;
SOFTWARE: WordPerfect 5.1; No. 6300471epad Version 4.0
CURRENTA APPLICATION NUMBER: US/09/089,522A

FILING DATE: 1998-06-03
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: Runnels, John H.
REGISTRATION NUMBER: 33451
REFERENCE/DOCKET NUMBER: 33451
REFERENCE/DOCKET NUMBER: 33451
RELEFAX: (225) 387-321
TELEFAX: (225) 346-8049
; INFORMATION FOR SEQ ID NO: 15:
SEQUENCE CHARACTERISTICS:
L'ENGTH: 10 amino acids
SOFTWARE: Patentin Release #1.0, Version #1.25;
SOFTWARE: WordPerfect 5.1; No. 630047lepad Version 4.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/089,522A
FILING DATE: 1998-06-03
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: Runnels, John H.
REGISTRATION NUMBER: 33451
REGISTRATION NUMBER: 37451
REJECOMMUNICATION INFORMATION:
TELEPHONE: (225) 387-3221
TELEPHONE: (225) 387-3221
SEQUENCE CHARACTERISTICS:
NFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 63.0%; Score 46; DB 4; Length 10; Best Local Similarity 75.0%; Pred. No. 0.52; Matches 6; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
APPLICANT: McCann, Samuel M.
APPLICANT: W. Wen H.
TITLE OF INVENTION: FSH-Releasing Peptides
NUMBER OF SEQUENCES: 41
CORRESPONDENCE ADDRESS:
ADDRESSEE: John H. Runnels
STREET: P. O. Box 2471
CITY: Baton Rouge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 15, Application US/09089522A
Patent No. 6300471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOADENSTICS:
LOADENSTH: 10 amino acids
TYPE: amino acid
TOPOLOGY: 1:n-r
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE: peptide FEATURE:
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OTHER INFORMATION: Xaa at 6 is (D-Ala); Xaa at 10 is Gly-NH2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SIMATE: LA
COUNTRY: USA
ZIP: 70821-2471
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER. IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25;
SOFTWARE: WordPerfect 5.1; NO. 6300471epad Version 4.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/089,522A
FILING DATE: 1998-06-03
FILING TATE: 1998-06-03
FILING DATE: 1998-06-03
FILIN
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                                                                         Sequence 3, Application US/09089522A

Patent No. 6300471

GENERAL INFORMATION:
APPLICANT: McCann, Samuel M.
APPLICANT: Yu, Wen H.
TITLE OF INVENTION: FSH-Releasing Peptides
NUMBER OF SEQUENCES: 41
CORRESPONDENCE ADDRESS:
ADDRESSE: John H. Runnels
STREET: P. O. Box 2471
CITY: Baron Rouge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
APPLICANT: MCann, Samuel M.
APPLICANT: WCann, Samuel M.
APPLICANT: YU, Wen H.
TITLE OF INVENTION: FSH-Releasing Peptides
NUMBER OF SEQUENCES: 41
CORRESPONDENCE ADDRESS:
ADDRESSEB: John H. Runnels
STREET: P. O. Box 2471
CITY: Baton Rouge
STATE: LA
COMPUTE: LA
COMPUTER: EAPABLE FORM:
COMPUTER READABLE FORM:
COMPUTER: IBM PC COMPAGIBLE
CO
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US-09-5089-522A-13
Sequence 13, Application US/09089522A
; Patent No. 6300471
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Best Local Similarity 75.0.
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                                                                    -09-089-522A-9
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OTHER INFORMATION: Xaa at 6 is (D-SerBut); Xaa at 10 is Gly-NH2"
) OTHER INFORMATION: /note= "Xaa at 1 is pyro-Glu; ) OTHER INFORMATION: Xaa at 6 is (SerBut); Xaa at 10 is Gly-NH2" US-09-089-522A-15
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SOFTWARE: Wordberfect 5.1; No. 6300471epad Version 4.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/089,522A
FILING DATE: 1998-06-03
CLASSIFICATION: 514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity 75.0%; Score 46; DB 4; Length 10; Similarity 75.0%; Pred. No. 0.52; 6; Conservative 0; Mismatches 2; Indels
                                                                DB 4; Length 10; 0.52;
                                                                                                2; Indels
                                                                                                                                                                                                                                                Sequence 17, Application US/09089522A

Patent No. 6300471

GENERAL INFORMATION: Ramuel M.
APPLICANT: Yu, Wen H.
TITLE OF INVENTION: FSH-Releasing Peptides
NUMBER OF SEQUENCES: 41

CORRESPONDENCE ADDRESS:
ADDRESSEE: John H. Runnels

STREET: P. O. Box 2471

CITY: Baton Rouge
                                                                Score 46; DB
Pred. No. 0.52
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-089-522A-21
; Sequence 21, Application US/09089522A
; Patent No. 6300471
; GENERAL INFORMATION:
APPLICANT: McCann, Samuel M.
APPLICANT: Yu, Wen H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: USA
ZIP: 70821-2471
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-D
                                                                  63.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 10 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                              Query Match
Best Local Similarity 75.0
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 HWSHGWYP 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 HWSHXWKP 9
                                                                                                                                  2 HWSHGWYP 9
                                                                                                                                                                   2 HWSHXWKP 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity
Matches 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                4
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US-09-089-522A-17
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Gaps
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OTHER INFORMATION: Xaa at 6 is (D-Trp); Xaa at 10 is Gly-NH2"
                                                                                  CUTY: Bac.
STATE: LA
COUNTRY: USA
ZIP: 7021-2471
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATIOS SYSTEM: PC-DOS/MS-DOS
SOFTWARE: MordPerfect 5.1; No. 6300471epad Version 4.0
CURRENT APPLICATION DATA:
SOFTWARE: WordPerfect 5.1; No. 6300471epad Version 4.0
CURRENT APPLICATION DATA:
SOFTWARE: WordPerfect 5.1; No. 6300471epad Version 4.0
CLASSIFICATION NUMBER: US/09/089,522A
FILING DATE: 1998-06-03
CLASSIFICATION NUMBER: 33451
REPREMENCE/DOCKET NUMBER: 3451
REPREMENCE/DOCKET NUMBER: 3751
TELEPONE: (225) 387-3221
TELEPONE: (225) 387-3221
TELEPONE: (225) 387-321
TELEPONE: 10 amino acids
TYPE: amino acid
TYPE: amino acid
TYPE: amino acid
TYPE: amino acid
TYPE: peptide
...ATTON: /note= "Xaa at 1 is pyro-G"
TYPE: TABLE POPLICA Xaa et 6 is (D-TEP); Xaa et 1.0
PD ALCOTUR TYPE: Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IS Floppy disk
COMPUTER: EMPE Compatible
COMPUTER: EMPE Compatible
COMPUTER: PatentIn Release #1.0, Version #1.25;
SOFTWARE: PatentIn Release #1.0, Version #1.25;
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/089,522A
FILING DATE: 1998-06-03
CLASSIFICATION: 514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 23, Application US/09089522A
Fatent No. 6300471
GENERAL INFORMATION:
APPLICANT: McCann, Samuel M.
APPLICANT: Yu, Wen H.
TITLE OF INVENTION: FSH-Releasing Peptides
NUMBER OF SEQUENCES: 41
CORRESPONDENCE ADDRESS:
ADDRESSE: John H. Runnels
STREET: P. O. Box 2471
CITY. BALON Rouge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 46; DB 4;
Pred. No. 0.52;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                63.0%; Scc. 75.0%; Pred. No. v...
TITLE OF INVENTION: FSH-Releasing Peptides NUMBER OF SEQUENCES: 41
CORRESPONDENCE ADDRESS: ADDRESSE: JOHN H. Runnels STREET: P. O. Box 2471
CITY: Baton Rouge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION
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Best Local Similarity 75.v.
6; Conservative
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STATE: LA
COUNTRY:
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TELEFAX: (225) 346-8049
INFORMATION FOR SEQ ID NO: 2
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 75.0
Matches 6; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 HWSHGWYP 9
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GY: linear
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                      2 HWSHGWYP
                                                        2 HWSHXWKP
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                                                                                                                                               -09-089-522A-27
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Xaa at 6 is (D-His-Bzl); Xaa at 10 is Gly-NH2"
                                                                                                                                                                                                                                                                         /note= "Xaa at 1 is pyro-Glu;
Xaa at 6 is (His-Bzl); Xaa at 10 is Gly-NH2"
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SOFTWARE: Patentin Release #1.0, Version #1.25;
SOFTWARE: WordPerfect 5.1; No. 6300471epad Version 4.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/089,522A
FILING DATE: 1998-06-03
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: Runnels, John H.
REGISTRATION NUMBER: 33451
REGISTRATION NUMBER: 33451
TELECOMMULCATION INFORMATION:
TELECOMMULCATION INFORMATION:
TELECOMMULCATION INFORMATION:
TELECOMMULCATION INFORMATION:
TELECOMMULCATION INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                         63.0%; Score 46; DB 4; Length 10; 75.0%; Pred. No. 0.52; 2; Indels tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: McCann, Samuel M.
APPLICANT: WcCann, Samuel M.
APPLICANT: Yu, Wen H.
TITLE OF INVENTION: FSH-Releasing Peptides
NUMBER OF SEQUENCES: 41
CORRESPONDENCE ADDRESS:
ADDRESSEE: John H. Runnels
STREET: P. O. Box 2471
CITY: Baton Rouge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STATE: LA
COUNTRY: USA
ZIP: 70821-2471
COMPUTER READABLE FORM:
MEDIUM TYPE: FLOPDY disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS
                                               9703P.1
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US-09-089-522A-25
US-09-086-25, Application US/09089522A
; Patent No. 6300471
; GENERAL INFORMATION:
NAME: Runnels, John H.
REGISTRATION UNDRER: 33451
REFERENCE/DOCKET NUMBER: 9703
TELECOMMUNICATION INFORMATION:
TELEPHONE: (225) 387-3221
TELEPHONE: (225) 346-8049
INFORMATION FOR SEQ ID NO: 23: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: (225) 346-8049
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 10 amino acids
TYPE: amino acid
TOPOLOGY: linear
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Best Local Similarity 75.0
Matches 6; Conservative
                                                                                                                                                                        10 amino acids
                                                                                                                                                                      LENGTH: 10 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:
                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 75.0
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE: peptide
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CTHER INFORMATION:
US-09-089-522A-25
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OTHER INFORMATION:
US-09-089-522A-23
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Gaps
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OTHER INFORMATION: Xaa at 6 is Nal(2); Xaa at 10 is Gly-NH2"
US-09-089-522A-27
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COUNTRY: USA
ZIP: 10821-2471
COMPUTER READBLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: TEM PC compatible
COMPUTER: TEM PC compatible
COMPUTER: TEM PC compatible
COMPARE: PatentIn Release #1.0, Version #1.25;
SOFTWARE: PatentIn Release #1.0, Version #1.25;
SOFTWARE: PatentIn Release #1.0, Version #1.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/089,522A
FILITING DATE: 1998-06-03
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: Runnels, John H.
REGISTRATION NUMBER: 33451
REFERENCE/DOCKET NUMBER: 9703P.1
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
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TELECOMMUNICATION INFORMATION:
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Patent No. 6300471
REPERTAL INFORMATION:
APPLICANT: Yu, Wen H.
TITLE OF INVENTION: SH-Releasing Peptides
NUMBER OF SEQUENCES: 41
CORRESPONDENCE ADDRESS:
ADDRESSES: ADON H. Runnels
STREET: P. O. Box 2471
CITY: Baton Rouge
                                                                                                                                                            FSH-Releasing Peptides
J. O. 197-087-222A-C.
Sequence 27, Application US/09089522A
Patent No. 6300471
GENERAL INFORMATION:
APPLICANT: McGann, Samuel M.
APPLICANT: Yu, Wen H.
TITLE OF INVENTION: FSH-Releasing Perore SEQUENCES: 41
CORRESPONDENCE ADDRESS:
ADDRESSE: JOHN H. Runnels
STREET: P. O. BOX 2471
CITY: Baton Rouge
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63.0%;
                    1YPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
FAMTURE:
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Best Local Similarity 75.0
Matches 6; Conservative
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SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acide
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CTHER INFORMATION: Xaa at 6 is (D-Nal(2)); Xaa at 10 is Gly-NH2"
US-09-522A-29
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                                COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATIOR SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25;
SOFTWARE: PatentIn Release #1.0, Version #1.25;
SOFTWARE: PatentIn Release #1.0, Version #1.0;
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/089,522A
FILING DATE: 1998-06-03
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: RUINGLE: 33451
REFERENCE/DOCKET NUMBER: 9703P.1
TELEPHONE: (225) 346-349;
INFORMATION POR SEQ ID NO: 29:
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
SEDENTE: 10 amino acid
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COUNTRY: USA

ZIP: 70821-2471

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

COMPUTER: IBM PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.25;

SOFTWARE: Wordberfect 5.1; No. 6300471epad Version 4.0

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/089,522A

FILING DATE: 1998-06-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      63.0%; Score 46; DB 4; Length 10; 75.0%; Pred. No. 0.52; 2; Indels cive 0; Mismatches 2; Indels
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APPLICANT: McCann, Samuel M.

APPLICANT: McCann, Samuel M.

APPLICANT: McCann, Samuel M.

APPLICANT: McCann, Samuel M.

ITLE OF INVENTION: FSH-Releasing Peptides

NUMBER OF SEQUENCES: 41

CORRESPONDENCE ADDRESS:

ADDRESSEE: John H. Runnels

STREET: P. O. Box 2471

COTTY: Baton Rouge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: Runnels, John H.
REPERENCE/DOCKET NUMBER: 37451
TELECOMMUNICATION INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (225) 387-3221
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
                    ZIP: 70821-2471
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy o
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Best Local Similarity
Matches 6: Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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) OTHER INFORMATION: /note= "Xaa at 1 is pyro-Glu;
) OTHER INFORMATION: Xaa at 6 is Nal(2); Xaa at 10 is (aza-Gly) "US-09-089-522A-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
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STATE:
LA
COUNTRY:
LA
COUNTRY:
LA
COMPUTER READABLE FORM:
MUDIUM TYPE:
COMPUTER READABLE FORM:
COMPUTER READABLE FORM:
COMPUTER:
MUDIUM TYPE:
COMPUTER:
COMPUTER:
MUDIUM TYPE:
COMPUTER:
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Pred. No. 0.52;
0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
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Query Match
Best Local Similarity 75.0%; Pred. No. 0.52;
Matches 6; Conservative 0; Mismatches 2; Indels
                                                                                                                       2 HWSHGWYP 9
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Search completed: March 2, 2004, 19:28:54 Job time: 17 secs

2 HWSHDWKP 9

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305, App 306, App 4, Appli

157, App 16, App 15, App 158, App 4, Appli 148, App 155, App 4, Appli

Sequence Seq

28, Appl 156, App 7, Appli 147, App 160, App 1, Appli 9, Appli 13, Appli

Sequence Sequence Sequence

Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence

Sequence 1 Sequence 1 Sequence 1

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5. US-10-360-101-159
5. US-10-170-096A-8
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6. US-10-170-096A-8
6. US-10-170-096A-8
6. US-10-170-096A-8
6. US-10-170-096A-4
6. US-10-170-096A-11
6. US-10-170-096
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US-09-305-924-9
US-10-351-641-114
US-10-351-641-13
US-10-351-641-13
US-10-360-101-1
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5, Appli

32, Appl

153, App

114, App

154, App

309, App

309, App

46, App
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144, A
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                                                                                                                     2004; 19:25:48 ; Search time 27 Seconds (without alignments) 78.205 Million cell updates/sec
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Sequence
Sequence
Sequence
Sequence
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1: /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep:*

2: /cgn2_6/ptodata/2/pubpaa/PET_MaW_PUB.pep:*

3: /cgn2_6/ptodata/2/pubpaa/DEG_NEW_PUB.pep:*

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5: /cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*

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RESULT: 4
US-10-617-561-18
Sequence 18, Application US/10617561
Sequence 18, Application US/20040018967A1
Publication No. US20040018967A1
GENERAL INFORMATION: & Mech. Coll., Board of Supervisors
Enright, Frederick M.
Jaynes, Jesse M.
Hansel, William
Koonce, Kenneth L.
McCann, Samuel M.
Yu, Wen H. Wen H.
Ti, Wen H. Tane D.
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OTHER INFORMATION: /note= "Xaa in position 1 denotes pyro-glutamic acid. This sequence is chicken II pare."
                                                                                                                                                                                                                                                                                                                                                                                                                          Foil, Lane D.
Froil, Fullip H.
Black Philip H.
TITLE OF INVENTION: Ligand/Lytic Peptide Compositions and
Methods of Use
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              93.2%; Score 68; DB 15; Length 10; 100.0%; Pred. No. 0.0071; tive 0; Mismatches 0; Indels
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COMPUTER: IBM PC compatible
OPERATURG SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION WHERE: us/10/617,561
FILING DATE: 11-Jul-2003
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER: 96A3.2-US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/09/381,879
FILING DATE: 25-Aug-1999
ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Runnels, John H. REGISTRATION NUMBER: 33,451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES: 18
CORRESPONDENCE ADDRESS:
ADDRESSE: John H. Runnels
STREET: P. O. Box 2471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELECOMMUNICATION INFORMATION:
TELEPHONE: (225) 387-3221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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INFORMATION FOR SEQ ID NO: 18:
SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CITY: Baton Rouge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 100.
Matches 9; Conservative
                                             2 HWSHGWYPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-617-561-18
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Sequence 304, Application US/10360101
Sequence 304, Application US/10360101
Sequence 304, Application US/10360101
Sequence 304, Application No. USCO40009550A1
GENERAL INFORMATION
APPLICANT: Moll, Gert N.
APPLICANT: Moll, Gert N.
TITLE OF INVENTION: Export and modification of (poly) peptide in the lantibiotic way
TITLE OF INVENTION: Export and modification of (poly) peptide in the lantibiotic way
TITLE OF INFORMATE: 2013-5673
CURRENT FILING DATE: 2003-02-07
PRIOR PRILING DATE: 2002-05-24
NUMBER OF SEQ ID NOS: 309
SOFTWARE: Patentin version 3.1
SEQ ID NO 304
LENGTH: 10
                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Moll, Gert N.
APPLICANT: Leenhouts, Cornelis J.
CURRENT ERPERBNCE: 2183-5673
CURRENT APPLICATION NUMBER: US/10/360,101
CURRENT APPLICATION NUMBER: EP 02077060.8
PRIOR APPLICATION NUMBER: EP 02077060.8
PRIOR FILING DATE: 2002-05-24
NUMBER OF SEQ ID NOS: 309
SOFTWARE: Patentin version 3.1
SEQ ID NO 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ) NAME/KEY: SITE

1 LOCATION: (4) . (6)

1 OTHER INFORMATION: No. US20040009550Ale = "A" on pos. 4 and 6 are linked by "S"

US-10-360-101-303
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95.9%; Score 70; DB 15; Length 10;
Best Local Similarity 90.0%; Pred. No. 0.0039;
Matches 9; Conservative 1; Mismatches 0; Indels
                                        Length 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match

95.9%; Score 70; DB 15; Length 10;
Best Local Similarity 90.0%; Pred. No. 0.0039;
Matches 9; Conservative 1; Mismatches 0; Indels
                                                                                           0; Indels
                                           95.9%; Score 70; DB 15; 90.0%; Pred. No. 0.0039; tive 1; Mismatches 0
                                                                                                                                                                                                                                                                                                       ; Sequence 303, Application US/10360101; Publication No. US20040009550A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OTHER INFORMATION: LHRH2 analogue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OTHER INFORMATION: LHRH1 analogue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT ORGANISM: Artificial Sequence
                                        Query Match
Best Local Similarity 90.0
Matches 9; Conservative
                                                                                                                                         1 EHWSHGWYPG 10
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US-10-360-101-303
US-10-360-101-2
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Sequence 32, Application US/10170096A
Publication No. US20030236184A1
GENERAL INFORMATION:
APPLICANT: University of New Hampshire
APPLICANT: Sower, Stacia A
APPLICANT: Silver, Matt
TITLE OF INVENTION: No. US20030236184A1e1 Polymucleotides Encoding Lamprey GnRH-III
TITLE OF INVENTION: No. US20030236184A1e1 Polymucleotides Encoding Lamprey GnRH-III
TITLE OF INVENTION: NO. US20030236184A1e1 Polymucleotides Encoding Lamprey GnRH-III
TURE OF INVENTION: NO. US20030236184A1e1 Polymucleotides Encoding Lamprey GnRH-III
TITLE OF INVENTION: 002-08-08
NUMBER OF SEQ ID NOS: 37
SOFTWARE: Patentin version 3.1
SEQ ID NO 32
LENGTH: 10
                                                                                                                                                          STATE: LA
COUNTRY: USA
ZIP: 70821-2471
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25;
WordPerfect 5.1; No. US20020165159Alepad Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OTHER INFORMATION: /note= "Xaa at 1 is pyro-Glu; Xaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        84.9%; Score 62; DB 13; Length 10
100.0%; Pred. No. 0.044;
ive 0; Mismatches 0; Indels
Yu, Wen H.
TITLE OF INVENTION: FSH-Releasing Peptides
NUMBER OF SEQUENCES: 41
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/10/109,331
PILING DATE: 28-Mar-2002
CLASSIFICATION NUMBER: US/10/109,331
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/297,989
FILING DATE: ~Unknown>
ATTORNEY/AGENT INFORMATION:
REGISTRATION NUMBER: 33451
REFERENCE/DOCKET NUMBER: 9703P-US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (225) 387-3221
TELEPHONE: (225) 387-3221
TELEPHONE: (225) 346-8049
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
CLEMETER OF ARRACTERISTICS:
CLEMETER OF ARRACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           at 10 is Gly-NH2"
SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                ADDRESSEE: John H. Runnels
STREET: P. O. Box 2471
CITY: Baton Rouge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 10 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: linear
MOLECULE TYPE: peptide
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Best Local Similarity 100.
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ORGANISM: chicken
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US-10-170-096A-32
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                                                Sequence 2, Application US/09941094A;

Facett No. US20020065226A1

GENERAL INFORMATION:

TELE TELET-Khodr, Theresa M.

TITLE OF INVENTION: No. US20020065226A1-Mammalian GnRH Analogs and Uses Thereof in ReTLE REFERENCE: P7345.2 (CIP)

CURRENT FILING DATE: 2001-08-28

PRIOR APPLICATION NUMBER: US/09/941,094A

CURRENT FILING DATE: 1999-10-15

NUMBER OF SEQ ID NOS: 4

SEQ ID NOS: 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: mat peptide
LOCATION: Within brain mRNA 121-150, within brain gene 2174-2203.
OTHER INFORMATION: MOD RES substitution of Gly residue at 10 by aza-Gly-NH2. Xaa re
OTHER INFORMATION: D-Arg. MOD RES Glu at position 1 is pyroglutamic acid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 144. Application US/10360101
Sequence 144. Application WS/10360101
GENERAL INFORMATION:
APPLICANT: Melhouts, Cornelis J.
APPLICANT: Lechhouts, Cornelis J.
TITLE OF INVENTION: Export and medification of (poly) peptide in the lantibiotic way
TITLE OF INVENTION NUMBER: US/10/360,101
CURRENT APPLICATION NUMBER: EP 02077060.8
PRIOR APPLICATION NUMBER: EP 02077060.8
NUMBER OF SEQ ID NOS: 309
NUMBER OF SEQ ID NOS: 309
SEQ ID NO 144
ILENGTH: 10
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88.9%; Pred. No. 0.033;
cive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 90.4%; Score 66; DB 9; Length 10; Best Local Similarity 90.0%; Pred. No. 0.013; Matches 9; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ) OTHER INFORMATION: (S1,C4)-sequence of LHRH2
US-10-360-101-144
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US-10-109-331-5
US-10-109-331-5
; Sequence 5, Application US/10109331
; Publication No. US20020165159A1
; GENERAL INFORMATION:
; APPLICANT: McCann, Samuel M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: PRT ORGANISM: Artificial Sequence
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Best Local Similarity 88.9
Matches 8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT
ORGANISM: Gallus gallus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 EHWSHGWYPG 10
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GENERAL INFORMATION:

PUBLICATION NO. US20040009550A1

GENERAL INFORMATION:

GENERAL INFORMATION:

APPLICANT: Methouts, Cornelis J.

TITLE OF INVENTION: Export and modification of (poly) peptide in the lantibiotic way

TITLE APPLICATION NUMBER: US/10/360,101

CURRENT APPLICATION NUMBER: US/10/360,101

CURRENT FILING DATE: 2003-02-07

PRIOR FILING DATE: 2002-05-24

NUMBER OF SEQ ID NOS: 309

SOFTWARE: Pacentin version 3.1

SEQ ID NO 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT MOLI, Gert N.
APPLICANT MOLI, Gert N.
APPLICANT Leenhouts, Cornelis J.
TITLE OF INVENTION EXPORT and modification of (poly)peptide in the lantibiotic way
FILE SPERENCE: 2183-5673
CURRENT APPLICATION NUMBER: US/10/360,101
CURRENT PILING DATE: 2003-02-07
PRIOR PILING DATE: 2002-05-24
NUMBER OF SEQ ID NOS: 309
SOFFWARE: Patentin version 3.1
SEQ ID NO 154
LENGTH: 10
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Score 61, DB 15, Length 10;
Pred. No. 0.06;
2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 60, DB 15, Length 10,
Pred. No. 0.082;
1, Mismatches 1, Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; OTHER INFORMATION: (C9)-sequence of gonadoliberin II
US-10-360-101-114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; OTHER INFORMATION: (Q1,C9)-sequence of LHRH2 US-10-360-101-154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1; Mismatches
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Publication No. US20040009550A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        82.2%;
80.0%;
    Query Match
Best Local Similarity 70.0%;
Matches 7; Conservative
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ORGANISM: Artificial Sequence
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Best Local Similarity 80.v
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Matches 8; Conservative
                                                                                          1 EHWSHGWYPG 10
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1 QHWAHAWYPG 10
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US-10-360-101-154
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APPLICANT: Moll, Gert N.
APPLICANT: Lechhouts, Cornelis J.
TITLE OF INVENTION: Export and modification of (poly) peptide in the lantiblotic way
FILE REPERRNCE: 2183-5673
CURRENT APPLICATION NUMBER: US/10/360,101
CURRENT APPLICATION NUMBER: EP 02077060.8
PRIOR APPLICATION NUMBER: EP 02077060.8
PRIOR PILING DATE: 2002-05-24
NUMBER OF SEC ID NOS: 309
SOFTWARE: Patentin version 3.1
SEQ ID NO 308
LENGTH: 10
                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Moll, Gert N.
APPLICANT: Moll, Gert N.
APPLICANT: Leenhouts, Cornelis J.
TITLE OF INVENTION: Export and modification of (poly) peptide in the lantibiotic way
TITLE REFERENCE: 2183-5673
CURRENT APPLICATION NUMBER: US/10/360,101
CURRENT FILING DATE: 2003-02-07
PRIOR FILING DATE: 2002-05-24
NUMBER OF SEQ ID NOS: 309
SOFTWARE: Patentin version 3.1
SEQ ID NO 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: SITE

CATION: (4)..(6)

DOCATION: (4)..(6)

US-10-360-101-308
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80.0%; Pred. No. 0.06;
tive 1; Mismatches 1; Indels
                                                                                                               Length 10;
                                                                                                                                                           0; Indels
                                                                                                          84.9%; Score 62; DB 15;
100.0%; Pred. No. 0.044;
tive 0; Mismatches 0
                         ) LOCATION: (10) ... (10)
; OTHER INFORMATION: X at position 10 = Gly-NH2 US-10-170-096A-32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ) OTHER INFORMATION: (Q1,C8)-sequence of LHRH2 US-10-360-101-153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 10
US-10-366-101-308
Sequence 308, Application US/10360101
Publication No. US20040009550A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                     Sequence 153, Application US/10360101 Publication No. US20040009550A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OTHER INFORMATION: LHRH2 analogue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Artificial Sequence
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Matches 8, Conservative
                                                                                                               Query Match
Best Local Similarity 100
Matches 8; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 QHWSHGWCPG 10
      NAME/KEY: MISC_FEATURE
                                                                                                                                                                                                   2 HWSHGWYP 9
                                                                                                                                                                                                                                               2 HWSHGWYP 9
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US-10-360-101-153
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Sequence 159, Deplication US/10360101
Sequence 159, Deplication US/10360101
Sequence 159, Deplication No. US2004009550A1
GENERAL INFORMATION:
APPLICAMY: Moll, Gert No.
TITLE OF INVENTION: Export and modification of (poly)peptide in the lantibiotic way FILE REFERENCE: 2183-2673
CURRENT APPLICATION NUMBER: US/10/360,101
CURRENT FILING DATE: 2003-02-07
PRIOR FILING DATE: 2002-05-24
NUMBER OF SEQ ID NOS: 309
SOFTWARE: Patentin version 3.1
SEQ ID NO 159
ILENGTH: 10
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Publication No. US20030236184A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: University Of New Hampshire
APPLICANT: Sower, Stacia A
APPLICANT: Solver, Matt
TITLE OF INVENTION: No. US20030236184Alel Polynucleotides Encoding Lamprey GRRH-III
FILE REFERENCE: 9815/59339
CURRENT APPLICATION NUMBER: US/10/170,096A
CURRENT PILING DATE: 2002-08-08
NUMBER OF SEQ 1D NOS: 37
GENERAL INFORMATION:

APPLICANT: Moll, Gert N.

APPLICANT: Moll, Gert N.

APPLICANT: Leenhouts, Cornelis J.

IITLE OF INVENTION: Export and modification of (poly) peptide in the lantibiotic way IITLE OF INVENTION: Export and modification of (poly) peptide in the lantibiotic way UNIVENTION EXPERIENCE: 2183-5673

CURRENT APPLICATION NUMBER: US/10/360,101

CURRENT APPLICATION NUMBER: B 02077060.8

PRIOR FILING DATE: 2002-05-24

NUMBER OF SEQ ID NOS: 309

SOFTWARE: PATENTIN VERSION 3.1

SEQ ID NO 146

LENGTH: 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Pest Local Similarity 66.7%; Pred. No. 0.37;
Matches 6; Conservative 2; Mismatches 1.
                                                                                                                                                                                                                                                                                                                                                                                                        FEATTRE:
7 OTHER INFORMATION: (S1,A4,C6)-sequence of LHRH2
US-10-366-101-146
                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
ORGANISM: Artificial Sequence
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1 QHWAHSWYP 9
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US-10-360-101-159
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Publication No. US20040009550A1
Publication No. US20040009550A1
APPLICANT: Moll, Gert N.
APPLICANT: Moll, Gert N.
TITLE OF INVENTION: Export and modification of (poly) peptide in the lantibiotic way
FILE REPERRNCE: 2183-5673
CURRENT APPLICATION NUMBER: US/10/360,101
CURRENT FILING DATE: 2003-02-07
PRIOR APPLICATION NUMBER: EP 02077060.8
PRIOR PELING DATE: 2002-05-24
NUMBER OF SEQ ID NOS: 309
SOFTWARE: Patentin version 3.1
SEQ ID NO 309
LENGTH: 10
                                                                         Sequence 307, Application US/10360101
Publication No. US20040009550A1
GENERAL INFORMATION:
APPLICANT: Moll, Gert N.
APPLICANT: Leethouts, Cornelis J.
TITLE OF INVENTION: Export and modification of (poly) peptide in the lantibiotic way
TITLE OF INVENTION: Export and modification of (poly) peptide in the lantibiotic way
TITLE REPERENCE: 2183-5673
CURRENT APPLICATION NUMBER: US/10/360,101
CURRENT PILING DATE: 2003-02-07
PRIOR PELICATION NUMBER: EP 02077060.8
PRIOR PLICATION NUMBER: EP 02077060.8
NUMBER OF SEQ ID NOS: 309
SOFTWARE: Patentin version 3.1
SEQ ID NO 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: SITE
| LOCATION: (2)..(4)
| OTHER INFORMATION: No. US20040009550Ale = "A" on pos. 2 and 4 are linked by "S"
US-10-360-101-307
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 87.5%; Pred. No. 0.2;
Matches 7; Conservative 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        , OTHER INFORMATION: (Q1,C7)-Sequence of LHRH2 US-10-360-101-309
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Publication No. US20040009550A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OTHER INFORMATION: LHRH2 analogue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Artificial Sequence
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Best Local Similarity 80.0
Matches 8, Conservative
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US-10-360-101-146
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US-10-360-101-309
                                    RESULT 13
US-10-360-101-307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT
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Sequence 8, Application US/10170096A
Sequence 8, Application US/10170096A
Publication No. US20030236184A1
GENERAL INFORMATION
APPLICANT: University Of New Hampshire
APPLICANT: Sower, Stacia A
APPLICANT: Sower, Stacia A
APPLICANT: Solver, Matc
TITLE OF INVENTION: No. US20030236184A1e1 Polynucleotides Encoding Lamprey GRRH-III
FILE REPERENCE: 9815/59339
CURRENT APPLICATION NUMBER: US/10/170,096A
CURRENT FILING DATE: 2002-08-08
NUMBER OF SEQ ID NOS: 37
SOFTWARE: Patentin version 3.1
SEQ ID NO 8
LENGTH: 93
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Sequence 2, Application US/10170096A
Publication No. US20030236184A1
GENERAL INFORMATION:
APPLICANT: University of New Hampshire
APPLICANT: Sower, Stacia A
APPLICANT: Silver, Matt
TITLE OF INVENTION: No. US20030236184A1e1 Polynucleotides Encoding Lamprey GnRH-III
TITLE OF INVENTION NUMBER: US/10/170,096A
CURRENT APPLICATION NUMBER: US/10/170,096A
CURRENT FILING DATE: 2002-08-08
NUMBER OF SEQ ID NOS: 37
SOFTWARE: Patentin version 3.1
SEQ ID NO 2
IENGTH: 94
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                                                                    Score 54; DB 15; Length 92;
Pred. No. 3.1;
1; Mismatches 2; Indels
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US-10-360-101-305
; Sequence 305, Application US/10360101
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70.0%;
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                                                                      Query Match
Best Local Similarity 70.0%;
Matches 7; Conservative
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Best Local Similarity 70.0
Matches 7; Conservative
; ORGANISM: 1. tridentatus
US-10-170-096A-6
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                                                                                                                                                                                          25 OHWSHDWKPG 34
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CRGANISM: g. australis
US-10-170-096A-2
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; ORGANISM: p. marinus
US-10-170-096A-8
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US-10-170-096A-2
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Sequence 6, Application US/10170096A
Publication No. US20030236184A1
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL SAPELICANT:
SILVER, Matt
APPLICANT: Silver, Matt
APPLICANT: Silver, Matt
FILE OF INVENTION: NO. US20030236184A1el Polynucleotides Encoding Lamprey GRH-III
FILE OF INVENT PELICATION NUMBER: US/10/170,096A
CURRENT PILING DATE: 2002-08-08
NUMBER OF SEQ ID NOS: 37
SOFTWARE: Patentin version 3.1
SEQ ID NO 6
LENGTH: 92
IYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 145.

Publication No. US20040009550A1

APPLICANT: Moll, Gert N.
APPLICANT: Moll, Gert N.
APPLICANT: Leehnouts, Cornelis J.
APPLICANT: Leehnouts, Cornelis J.
APPLICANT: Moll, Gert N.
APPLICANT: Moll, Gert N.
APPLICANTON: Export and modification of (poly) peptide in the lantibiotic way
FILE REPERENCE: 2183-5673
CURRENT APPLICATION NUMBER: US/10/360,101
CURRENT PILING DATE: 2003-02-07
PRIOR FILING DATE: 2002-05-24
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: (S1, A4, C5) - sequence of LHRH2
                                                                                                                                                                                                                                                   COCATION: (10) (10) OTHER INFORMATION: X at position 10 = Gly-NH2 US-10-170-096A-33
                                                                                                                                                              LOCATION: (1)._(1)
OTHER INFORMATION: X at position 1 = pGlu
FEATURE:
       SOFTWARE: Patentin version 3.1
SEQ ID NO 33
LENGTH: 10
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SOFWRARE: Patentin version 3.1
SEQ ID NO 145
ERNOTH: 10
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ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 97.5
Matches 7; Conservative
                                                                                                                   FEATURE:
NAME/KEY: MISC_FEATURE
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2 HWACGWYPG 10
                                                                                                                                                                                                                                  NAME/KEY: MISC_FEATURE
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                                                                      TYPE: PRT
ORGANISM: dogfish
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-360-101-145
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US-10-170-096A-6
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.ler-Khodr, Theresa M. SINGS26A1-Mammalian GnRH Analogs and Uses Thereof in ResiNTION: No. US20020065226A1-Mammalian
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Publication No. US20040009550A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Moll, Gert N.
APPLICANT: Moll, Gert N.
APPLICANT: Export and modification of (poly)peptide in the lantiblotic way TITIE OF INVENTION: Export and modification of CORRENT APPLICATION NUMBER: US/10/360,101
CURRENT APPLICATION NUMBER: US/10/360,101
CURRENT FILING DATE: 2003-02-07
PRIOR APPLICATION NUMBER: EP 02077060.8
PRIOR FILING DATE: 2002-05-24
NUMBER OF SEQ ID NOS: 309
SOFFWARE: ParentIn version 3.1
SEQ ID NO 157
LENGTH: 10
                                                                                                                                                                                                                                                                                                                                         FEATURE:
NAME/KEY: mat_peptide
LOCATION: unknown
COTHER INFORMATION: MOD_RES substitution of Gly residue at 10 with aza-Gly-NH2.
CTHER INFORMATION: D-Arg. MOD_RES Glu at position 1 is pyroglutamic acid.
US-09-941-094A-4
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US-10-617-561-16
Sequence 16, Application US/10617561
Sequence 16, Application William
Sequence 16, Application No. US20040018967A1
GENERAL INFORMATION:
APPLICANT: La. State Univ. & Mech. Coll., Board of Supervisors
Jaynes, Jesse M.
Jaynes, William
Hansel, William
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         71.2%; Score 52; DB 9; Length 10; 70.0%; Pred. No. 0.93; 2; Indels iive 1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; OTHER INFORMATION: (Q1, A4, S5, C10) -sequence of LHRH2 US-10-360-101-157
                  APPLICANT: Siler-Khodr, Theresa M.
TITLE OF INVENTION: No. US20020065226A1-Mamma;
TITLE OF INVENTION: Pregnancy
FILE REFERENCE: P745.2(CIP)
CURRINT APPLICATION UNDER: US/09/941,094A
CURRINT FILING DATE: 2001-08-28
PRIOR APPLICATION NUMBER: US 09/419,161
PRIOR FILING DATE: 1999-10-15
SEQ ID NO 4
SEQ ID NO 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Koonce, Kenneth L.
McCann, Samuel M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT
ORGANISM: Artificial Sequence
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Best Local Similarity 70.0
Matches 7; Conservative
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                                                                                                                                                                                                                                                                                            TYPE: PRT
ORGANISM: Salmo salar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 25
US-10-360-101-157
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US-10-366
US-10-366
Sequence 306, Application US/10360101
Septence 306, Application US/10360101
Septence 306, Application NO: US20040009550A1
Septence 306, Application No: US20040009550A1
Septence 306, USANT: Leenhouts, Cornelis J.
TITLE OF INVENTION: Export and modification of (poly)peptide in the lantibiotic way
TITLE OF INVENTION: Export and modification of (poly)peptide in the lantibiotic way
CURRENT APPLICATION NUMBER: US/10/360,101
STROR FILING DATE: 2003-02-07
SPRIOR FILING DATE: 2002-05-24
NUMBER OF SEQ ID NOS: 309
SSEQ ID NOS: 309
SSEQ ID NO 306
IENGTH: 10
               GENERAL INFORMATION:
APPLICANT: HOLI, Gert N.
APPLICANT: Leehnouts, Cornelis J.
TITLE OF INVENTION: Export and modification of (poly) peptide in the lantibiotic way
FILE REFERENCE: 2183-5673
CURRENT APPLICATION NUMBER: US/10/360,101
CURRENT APPLICATION NUMBER: EP 02077060.8
PRIOR APPLICATION NUMBER: EP 02077060.8
NUMBER OF SEQ ID NOS: 309
SOFTWARE: Patentin version 3.1
SEQ ID NO 305
LENGTH: 10
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LOCATION: (4)..(7)

COTHER INFORMATION: No. US20040009550Ale = "A" on pos. 4 and 7 are linked by "S"

US-10-360-101-306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; LOCATION: (6)..(9)
; OTHER INFORMATION: No. US20040009550Ale = "A" on pos. 6 and 9 are linked by "S"
US-10-360-101-305
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 72.6%; Score 53; DB 15; Length 10; Best Local Similarity 60.0%; Pred. No. 0.69; Matches 6; Conservative 2; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OTHER INFORMATION: LHRH2 analogue
                                                                                                                                                                                                                                                                                                                                                                                                                         OTHER INFORMATION: LHRH2 analogue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
ORGANISM: Artificial Seguence
Publication No. US20040009550Al
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Best Local Similarity 70.0
Matches 7; Conservative
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1 OHWAHGAYPG 10
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US-09-941-094A-4
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LOCATION: 1.33
OTHER INFORMATION: /note= "Xaa in position 1 denotes pyro-glutamic acid. This sequence is an 1-LHRH-IIT/Accate fusion peptide." SEQUENCE DESCRIPTION: SEQ ID NO: 15:
                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION DATA:

CURRENT APPLICATION DATA:

APPLICATION DATA:

APPLICATION NUMBER: US/10/617,561

FILING DATE: 1-Jul-2003

CLASSIFICATION: 4UNROWN>

PRIOR APPLICATION: 4UNROWN>

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US/09/381,879

FILING DATE: 25-Aug-1999

ATORNEY/AGATON NUMBER: 33,451

REFERENCE/DOCKT NUMBER: 96A3.2-US

TELECOMMUNICATION INFORMATION:

TELECOMMUN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   71.2%; Score 52; DB 15; Length 33; 77.8%; Pred. No. 2.5; tive 0; Mismatches 2; Indels
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J. OTHER INFORMATION: (Q1,A4,S6,C9)-sequence of LHRH2

US-10-360-1101-158
                                                                                                                                                                                                                                                      ZIP: 70821-2471
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                       NUMBER OF SEQUENCES: 18
CORRESPONDENCE ADDRESS:
ADDRESSE: John H. Runnels
STREET: P. O. Box 2471
CITY: Baton Rouge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: linear MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best_Local Similarity 77.8
Matches 7; Conservative
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US-10-617-561-15
US-10-617-561-15
Sequence 15, Application US/10617561
Publication No. US20040018967A1
CENERAL INFORMATION:
APPLICANT: La. State Univ. & Mech. Coll., Board of Supervisors
Jayres, Jesse M.
Hannel, William
Konce, Kenneth L.
McCann, Samuel M.
Yu, Wen H.
Yu, Wen H.
Yu, Wen H.
Meiros Btricia A.
Foil, Lane D.
Elzer, Philip H.
TITLE OF INVENTION: Ligand/Lytic Peptide Compositions and
Methods of Use
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCATION: 1.10 OTHER INFORMATION: /note= "Xaa in position 1 denotes pyro-glutamic acid. This sequence is 1-LHRH-III." SEQUENCE DESCRIPTION: SEQ ID NO: 16:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Melrose, Patricia A.
Foil, Lane D.
Elzer, Philip.
TITLE OF INVENTION: Ligand/Lytic Peptide Compositions and
Methods of Use
                                                                                                                                                                                                                                                                                                                                                                                         71.2%; Score 52; DB 15; Length 10; 77.8%; Pred. No. 0.93; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Runnels, John H.
REGISTRATION NUMBER: 33,451
REFERENCE/POCKET NUMBER: 96A3.2-US
TELEPHONE: (225) 387-321
TELEPHONE: (225) 387-321
                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
ADDRESSES: John H. Runnels
STREET: P. O. Box 2471
CITY: Baton Rouge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 10 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION FOR SEQ ID NO: 16:
SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 77.8'
Matches 7; Conservative
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US-10-360-101-158
US-10-360-101-158
Sequence 158, Application US/10360101
Publication No. US20040009550A1
Publication No. US20040009550A1
GRNERAL INFORMATION:
APPLICANT: Mol. Gert N.
APPLICANT: Leenhouts, Cornells J.
TITLE OF INVENTION: Export and modification of (poly)peptide in the lantibiotic way;
FILE REFERENCE: 2183-5673
CURRENT APPLICATION NUMBER: US/10/360,101
CURRENT FILING DATE: 2003-02-07
PRIOR PILING DATE: 2003-06-24
NUMBER OF SEQ ID NOS: 309
SOFTWARE: Patentin version 3.1
LENGTH. ...
Gaps
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Sequence 155, Application US/10360101
Publication No. US20040009550A1
APPLICANT: HOLD.
APPLICANT: Moll, Gert N.
APPLICANT: Holl, Gert N.
TILE OF INVENTION: Export and modification of (poly) peptide in the lantibiotic way FILE REFERENCE: 2183-5673
CURRENT APPLICATION NUMBER: US/10/360,101
CURRENT APPLICATION NUMBER: EP 02077060.8
PRIOR APPLICATION NUMBER: EP 02077060.8
NUMBER OF SEQ ID NOS: 309
SOFTWARE: PatentIn version 3.1
SEQ ID NO 155
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Publication No. US20020165159A1

GENERAL INPORMATION:

APPLICANT: W.C. Wen H.

TITLE OF INVENTION: FSH-Releasing Peptides

NUMBER OF SEQUENCES: 41

CORRESPONDENCE ADDRESS:

ADDRESSEE: John H. Runnels

STREET: P. O. Box 2471

CITY: Baton Rouge
                                                                                                                                                                                                                                                                                                                                                                                                           ; OTHER INFORMATION: (Q1,A4,S5,C8)-sequence of LHRH2
US-10-360-101-155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/10/109,331
FILING DATE: 28-Mar-2002
CLASSIFICATION: «Unknown»
PRIOR APPLICATION ON THE STATEMENT APPLICATION NUMBER: US/09/297,989
FILING DATE: «Unknown»
ATTORNEY, AGENT INFORMATION:
NAME: RUNDES: JOHN H.
REGISTRATION NUMBER: 33451
REFERENCE, DOCKET NUMBER: 9703P-US
TELECOMMUTICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: USA
ZIP: 70821-241
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION DATA:
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INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                              TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: amino acid
TOPOLOGY: linear
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Best Local Similarity 60.0
Matches 6; Conservative
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US-10-109-331-4
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; Sequence 148, DS20040009550A1
; Sequence 148, DS20040009550A1
; GENERAL INFORMATION:
    APPLICANT: Moll, Gert N.
    APPLICANT: Leenhouts, Cornelis J.
    TITLE OF INVENTION: Export and modification of (poly)peptide in the lantibiotic way
    FILE REPRENCE: 2081-567
CURRENT APPLICATION NUMBER: US/10/360,101
    CURRENT PILING DATE: 2003-02-07
    PRIOR FILING DATE: 2002-05-24
    NUMBER OF SEQ ID NOS: 309
    SOFTWARE: Patentin version 3.1
    SEQ ID NO 148
    LENGTH: 10
                                                                                                                                                                                                                                                                              Sequence 4. Application US/10170096A
Publication No. US20030236184A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Sower, Stacia A
APPLICANT: Watt
TITLE OF INVENTION: No. US20030236184A1el Polymucleotides Encoding Lamprey GRRH-III
FILE REFERENCE: 9815/59339
CURRENT APPLICANION NUMBER: US/10/170,096A
CURRENT FILING DATE: 2002-08-08
NUMBER OF SEQ ID NOS: 37
SOFTWARE: Patentin version 3.1
SEQ ID NO 4
LENGTH: 92
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                           Score 51; DB 15; Length 10; Pred. No. 1.3; 2; Mismatches 2; Indels
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US-10-360-101-148
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                                Query Match
Best Local Similarity 60.0%;
Matches 6; Conservative
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Matches 6; Conservative
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Best Local Similarity 60.0
Matches 6; Conservative
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QHWTHDWKPG 34
                                                                                                                             1 EHWSHGWYPG 10
                                                                                                                                                                            1 QHWAHSWYCG 10
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, ORGANISM: m. mordax
US-10-170-096A-4
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US-10-360-101-155
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US-10-170-096A-4
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SOFTWARE: PatentIn Release #1.0, Version #1.25; WordPerfect 5.1; No. US20020165159Alepad Version 4.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 13; Length 10;
           Score 48; DB 15; Length 10;
Pred. No. 3.2;
2; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Version #1.25;
                                                                                                                                                                                                                                      Sequence 7, Application US/10109331
; Publication No. US20020165159A1
GENERAL INFORMATION:
    APPLICANT: MCCann, Samuel M.
    TITLE OF INVENTION: FSH-Releasing Peptides
    NUMBER OF SEQUENCES: 41
    CORRESPONDENCE 30DDRESS:
    ADDRESSEE: John H. Runnels
    STREET: P. O. Box 2471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PILING DATE: 28-MAI-2002
PILING DATE: 28-MAI-2002
CLASSIFICATION: «Unknown»
PRIOR APPLICATION DATA:
PILING DATE: «Unknown»
ATTORNEY, AGENT INFORMATION:
NAME: Runnels, John H.
REGISTRATION NUMBER: 33451
REFERENCE/DOCKET NUMBER: 9703P-US
TELEPHONE: (225) 346-8049
TELEPRAX: (225) 346-8049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
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APPLICATION NUMBER: US/10/109,331
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Pred. No. 4
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SEQUENCE DESCRIPTION: SEQ 1D NO:
US-10-109-331-7
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Publication No. US20040009550A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 10 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
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Best Local Similarity 75.0%;
Matches 6; Conservative
                 65.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: USA
ZIP: 70821-2471
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: Baton Rouge
STATE: LA
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                 Query Match
Best Local Similarity 60.0
Matches 6; Conservative
                                                                                                  1 EHWSHGWYPG 10
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Fublication No. US20040009550A1
GENERAL INFORMATION:
APPLICANT:
APPLICANT:
APPLICANT:
CURRENT APPLICANTION WOUNDER: US/10/360,101
CURRENT APPLICATION NUMBER: US/10/360,101
CURRENT APPLICATION NUMBER: EP 02077060.8
PRIOR APPLICATION NUMBER: EP 02077060.8
PRIOR FILING DATE: 2002-05-24
NUMBER OF SEQ ID NOS: 309
SOFTWARE: Patentin version 3.1
SEQ ID NO 156
LENGTH: 10
                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: University Of New Hampshire
APPLICANT: University Of New Hampshire
APPLICANT: Sower, Stacia A
APPLICANT: Sower, Stacia A
APPLICANT: Sower, Matc
APPLICANT: Silver, Matc
TITLE OF INVENTION: No. US20030236184Alel Polynucleotides Encoding Lamprey GnRH-III
FILE REFERENCE: 9815/59339
CURRENT APPLICATION NUMBER: US/10/170,096A
CURRENT FILING DATE: 2002-08-08
NUMBER OF SEQ ID NOS: 37
SOFTWARE: Patentin version 3.1
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OTHER INFORMATION: /note= "Xaa at 1 is pyro-Glu; Xaa
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                                                                                                Score 48; DB 13; Length 10;
Pred. No. 3.2;
1; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; LOCATION: (10) ... (10); OTHER INFORMATION: X at position 10 = Gly-NH2 US-10-170-096A-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCATION: (1)..(1)
OTHER INFORMATION: X at position 1 = pGlu
                      at 10 is Gly-NH2" SEQUENCE DESCRIPTION: SEQUENCE DESCRIPTION: SEQUENCE DESCRIPTION: 4:
                                                                                                                                                                                                                                                                                                                              Sequence 28, Application US/10170096A Publication No. US20030236184A1 GENERAL INFORMATION:
                                                                                                       65.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            65.8%;
75.0%;
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ORGANISM: Artificial Sequence
PEATURE:
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NAME/KEY: MISC_FEATURE
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HWSYGWLP 9
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Best Local Similarity
Matches 6; Conserv
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Best Local Similarity
Matches 6; Conserv
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US-10-360-101-156
                                                                                                                                                                                                                                                                                                                   US-10-170-096A-28
                                                            ÚS-10-109-331-4
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COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: Ploppy disk
COMPUTER: Elb PC Compatible
COMPUTER: Patentin Release #1.0, Version #1.25;
SOFTWARE: Patentin Release #1.0, Version #1.25;
SOFTWARE: Patentin Release #1.0, Version #1.25;
SOFTWARE: Patentin Release #1.0, Version #1.25;

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/109,331
PILING DATE: SPANA:
APPLICATION NUMBER: US/09/297,989
FILING DATE: CUNROWN>
RADICATION NUMBER: 3451
REPERENCE/DOCKET NUMBER: 3451
REFERENCE/DOCKET NUMBER: 3473
TELECOMMUTCATION INPORMATION:
TELEPHONE: (225) 346-8049
INPORMATION FOR SEQ ID NO: 1.
FELERAC TELECATION CATABLE TELESTORE TO NOT TELESTORE TELESTORE TO NOT TELESTORE TELEST
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 13; Length 10; 5.8;
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| Publication No. US20020165159A1
| GENERAL INFORMATION |
| APPLICANT W. Wen H. |
| TITLE OF INVENTION: FSH-Releasing Peptides |
| NUMBER OF SEQUENCES: 41 |
| CORRESPONDENCE ADDRESS: |
| STREET: P. O. Box 2471 |
| STREET: P. O. Box 2471 |
| CITY: Baton Rouge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 46; DB 1
Pred. No. 5.8;
0; Mismatches
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APPLICATION NUMBER: US/10/109,331
FILING DATE: 28-Mar-2002
CIASSIFICATION: «UNKNOWN»
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/297,989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               st 10 is Gly-NH2"

SEQUENCE DESCRIPTION: SEQ ID NO: 1:
US-10-109-331-1
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ATTORNEY/AGENT INFORMATION:
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75.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
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Best Local Similarity 75.0
Matches 6; Conservative
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COUNTRY: USA
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Sequence 160, Application US/10360101
Publication No. US20040009550A1
SEQUENAL INFORMATION:
APPLICAMY: Moll, Gert N.
APPLICAMY: Leenhouts, Cornelis J.
TITLE OF INVENTION: Export and modification of (poly)peptide in the lantibiotic way
FILE REPREMENT SPECIAL ON UNMER: US/10/360,101
CURRENT PILING DATE: 2003-02-07
PRIOR PRIOR PAPLICATION WUMBER: EP 02077060.8
PRIOR PRIOR PRILING DATE: 2002-05-24
NUMBER OF SEQ ID NOS: 309
SOUTHWARE: Patentin version 3.1
SEQ ID NO 160
LENGTH: 10
                               APPLICANT: Leenhouts, Cornelis J.

TITLE OF INVENTION: Export and modification of (poly) peptide in the lantibiotic way FILE REFERENCE: 2183-5673
CURRENT APPLICATION NUMBER: US/10/360,101
PRIOR APPLICATION NUMBER: EP 02077060.8
PRIOR FILING DATE: 2003-05-24
NUMBER OF SEQ ID NOS: 309
SOFTWARE: Patentin version 3.1
LENGTH: 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        64.4%; Score 47; DB 15; Length 10;
60.0%; Pred. No. 4.3;
Live 2; Mismatches 2; Indels
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US-10-360-101-160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 1, Application US/10109331

Sequence 1, Application No. US20020165159A1

GENERAL INFORMATION:

APPLICANT: McCann, Samuel M.

Yu, Wen H.

TITLE OF INVENTION: FSH-Releasing Peptides
NUMBER OF SEQUENCES: 41

CORRESPONDENCE ADDRESSE:

ADDRESSEE: John H. Runnels

STREET: P. O. Box 2471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; OTHER INFORMATION: (Q1,S2,A4,C5)-sequence of LHRH2
US-10-360-101-147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
ORGANISM: Artificial Sequence
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ORGANISM: Artificial Sequence
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STATE: LA
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Best Local Similarity 60.0
Matches 6; Conservative
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1 OSWACGWYPG 10
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CUMTYR: USA
COUNTRY: USA
CONTRY: USA
ZIP: 70821-2471
COMPUTER: FRADALE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25;
SOFTWARE: Patentin Release #1.0, Version #1.25;
CURRENT APPLICATION NATA:

APPLICATION NUMBER: US/10/109, 331
FILING DATE: 28-Mar-2002
CLASSIFICATION NUMBER: US/09/297, 989
FILING DATE: CURROWN-
PRIOR APPLICATION NUMBER: US/09/297, 989
FILING DATE: CURROWN-
MAWE: RUINGER: US/09/297, 989
FILING DATE: CURROWN-
MAWE: RUINGER: 38-Mar-10N:
REPRENCE/DOCKET NUMBER: 3703P-US
TELECOMUNICATION INPORMATION:
TELEPHONE: (225) 387-3221
TELEPHONE: (225) 346-8049
TELEPHONE: (225) 346-8049
TELEPHONE: (225) 346-8049
              ore 46; DB 13; Length 10;
ed. No. 5.8;
Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: /note= "Xaa at 1 is pyro-Glu; Xaa at 6 is (SerBut); Xaa at 10 is Gly-NH2" SEQUENCE DESCRIPTION: SEQ ID NO: 15:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 10;
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                                                                                                                                                                                                                                                   Sequence 15, Application US/10109331

Publication No. US20020165159A1

GENERAL INFORMATION: Samuel M.
APPLICANT: MCCann, Samuel M.
TITLE OF INVENTION: FSH-Releasing Peptides
NUMBER OF SEQUENCES: 41

CORRESPONDENCE ADDRESS:
ADDRESSES: John H. Runnels
STREET: P. O. Box 2471

COTTY: Baton Rouge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 46; DB 13;
Pred. No. 5.8;
); Mismatches 2;
                  Score 46;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 17, Application US/10109331
Publication No. US20020165159A1
GENERAL INFORMATION: APPLICANT: McCann, Samuel M.
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                  Query Match
Best Local Similarity 75.0%;
Matchés 6; Conservative
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Best Local Similarity 75.0
Matches 6; Conservative
                                                                                                       2 HWSHGWYP 9
                                                                                                                                                    2 HWSHXWKP
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US-10-109-331-17
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US-10-109-331-15
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                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                          .
                                                                                                                                                                                                                                         JIDK INFORMATION: /note= "Xaa at 1 is pyro-Glu; Xaa at 6 is (D-Ala); Xaa at 10 is Gly-NH2"; SEQUENCE DESCRIPTION: 8EQ ID NO: 9: US-10-109-331-9
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Xaa at 1 is pyro-Glu;

Xaa at 6 is (D-Leu); Xaa at 10 is Gly-NH2"

SEQUENCE DESCRIPTION: SEQ ID NO: 13:
US-10-109-331-13
                                                                                                                                                                                                                                                                                                                                                                         Score 46; DB 13; Length 10;
Pred. No. 5.8;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 13, Application US/10109331
Fublication No. US20020165159A1
GENERAL INFORMATION:
TILLE APPLICANT: McCann, Samuel M.
TITLE OF INVENTION: FSH-Releasing Peptides
NUMBER OF SEQUENCES: 41
CORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESS:
STREET: P. O. Box 2471
CITY: Baton Rouge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/10/109,331
FILING DATE: 28-Mar-2002
CLASSIPICATION: «Unknown»
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/297,989
FILING DATE: «Unknown»
ATTORNEY AGENT INFORMATION:
NAME: RUNNels, John H.
REGISTRATION NUMBER: 33451
REFERENCE/DOCKET NUMBER: 3703P-US
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                  REFERENCE/DOCKET NUMBER: 9703P-US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (225) 387-3221
TELEFAX: (225) 346-8049
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: (225) 387-3271
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
TYPE: amino acids
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:
REGISTRATION NUMBER: 33451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ZIP: 70821-2471
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                    LENGTH: 10 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                           Query Match 63.0%;
Best Local Similarity 75.0%;
Matches 6; Conservative (
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COMPUTER 108A
ZIP: 70821-2471
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Realease #1.0, Version #1.25;
NordPerfect 5.1; No. US20020165159Alepad Version 4.0
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Xaa at 6 is (D-Trp); Xaa at 10 is Gly-NH2"
SEQUENCE DESCRIPTION: SEQ ID NO: 21:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  63.0%; Score 46; DB 13; Length 10; 75.0%; Pred. No. 5.8; 2; Indels :ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 23, Application US/10109331
| Publication No. US20020165159A1
| GENERAL INFORMATION: Samuel M. APPLICANT: WCCarn, Samuel M. TITLE OF INVENTION: FSH-Releasing Peptides NUMBER OF SEQUENCES: 41
| CORRESPONDENCE ADDRESS: ADDRESSEE: John H. Runnels STREET: P. O. Box 2471
| CITY: Baton Rouge STATE: LA
CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/10/109,331
FILING DATE: 28-Mar-2002
CLASSIFICATION - UNKNOWN->
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATE: US/09/297,989
FILING DATE: ADACTORN-NUMBER: US/09/297,989
FILING DATE: ADACTORN-NUMBER: 33451
REPERRNCE/DOCKET NUMBER: 3703P-US
REPERRNCE/DOCKET NUMBER: 3703P-US
TELEPRONE (225) 387-3221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/109,331
FILING DATE: 28-Mar-2002
CLASSIFICATION: «Unknown»
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/297,989
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: 9703P-US TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: Runnels, John H.
REGISTRATION NUMBER: 33451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: (225) 387-3221
TELEFAX: (225) 346-8049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO: 23
SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                        TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 75.v
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 HWSHGWYP
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COMPUTER READABLE FORM:
MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25;
WordPerfect 5.1; No. US20020165159Alepad Version 4.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        , Xaa at 6 is (D-SerBut); Xaa at 1 is pyro-Glu; Xaa at 6 is (D-SerBut); Xaa at 10 is Gly-NH2"; SEQUENCE DESCRIPTION: SEQ ID NO: 17:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       63.0%; Score 46; DB 13; Length 10; 75.0%; Pred. No. 5.8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: FSH-Releasing Peptides
NUMBER OF SEQUENCES: 41
CORRESPONDENCE ADDRESS:
ADDRESSE: John H. Runnels
STREET: P. O. Box 2471
CITY: Baton Rouge
                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/10/109,331
FILING DATE: 28-Mar-2002
CLASSIFICATION . UNKNOWN>
PRIOR APPLICATION . UNKNOWN>
PILING DATE: CURROWN>
PILING DATE: CURROWN>
ATTORREY/AGENT INFORMATION:
REGISTRATION NUMBER: 3451
REGISTRATION NUMBER: 3451
REFERENCE/DOCKET NUMBER: 3703P-US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (225) 346-8049
INFORMATION FOR SEQ ID NO: 17:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 10 amino acids
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STATE: LA
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 75.03
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 HWSHGWYP 9
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US-10-109-331-21
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63.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 63.0
Best Local Similarity 75.0
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                 COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 HWSHGWYP 9
2 HWSHXWKP 9
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US-10-109-331-29
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                                                          RESULT 46
US-10-109-331-27
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                                                                                                                                                                                                                                       Gaps
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                                                                             JARA AL GAS (His-Bzl); /note= "Xaa at 1 is pyro-Glu; Xaa at 6 is (His-Bzl); Xaa at 10 is Gly-NH2"; SEQUENCE DESCRIPTION: SEQ ID NO: 23:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              63.0%; Score 46; DB 13; Length 10; 75.0%; Pred. No. 5.8; Live 0; Mismatches 2; Indels
                                                                                                                                                                                              Score 46; DB 13; Length 10;
Pred. No. 5.8;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                RESULT 45
US-10-109-331-25
; Sequence 25, Application US/10109331
; Publication No. US20020165159A1
; GENERAL INFORMATION:
; APPLICANT: MCCARN, Samuel M.
; TITLE OF INVENTION: FSH-Releasing Peptides
; NUMBER OF SEQUENCES: 41
; CORRESPONDENCE ADDRESS:
; ADDRESSEE JOHN H. Runnels
STREET: P. O. Box 2471
: CITY: Baton Rouge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATPLICATION DAILS

PRICK APPLICATION NUMBER: US/09/297,989

PILING DAIE: «Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Runnels, John H.
REGISTRATION NUMBER: 33451

REFERRENCE/BOCKET NUMBER: 9703P-US
TELEPHONE: (225) 387-3221

TELEPAX: (225) 346-8049

INFORMATION FOR SEQ ID NO: 25:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/109,331
FILING DATE: 28-Mar-2002
CLASSIFICATION: <UNKNOWN>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY: USA
ZIP: 70821.2471
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 10 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
      LENGTH: 10 amino acids
                                                                                                                                                                                                Query Match 63.0%;
Best Local Similarity 75.0%;
Matches 6; Conservative
                    TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 75.0
Matches 6; Conservative
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CURRENT APPLICATION DATA:

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/10/109,331

FILING DATE: 28 Mar-2002

CLASSIFICATION: «Unknown»

PRIOR APPLICATION AUMEN: US/09/297,989

FILING DATE: "Us/Anthonn»

APPLICATION NUMBER: US/09/297,989

FILING DATE: "Us/Anthonn»

APPLICATION NUMBER: 33451

ATTORNEY AGENT INFORMATION:

NAME: Runnels, John H.

REGISTRATION NUMBER: 37351

TELECOMMUNICATION INFORMATION:

TELECOMMUNICATION INFORMATION:

TELECOMMUNICATION INFORMATION:

TELECOMMUNICATION INFORMATION:

TELECOMMUNICATION INFORMATION:

TELECOMMUNICATION OF 32:

SEQUENCE CHARACTERISTICS:

SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: /note= "Xaa at 1 is pyro-Glu; Xaa at 6 is Nal(2); Xaa at 10 is (aza-Gly)" SEQUENCE DESCRIPTION: SEQ ID NO: 31:
                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 10
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APPLICANT: Yu, Wen H.
TITLE OF INVENTION: FSH-Releasing Peptides
NUMBER OF SEQUENCES: 41
CORRESPONDENCE ADDRESS:
ADDRESSEE: John H. Runnels
STREET: P. O. Box 2471
CITY: Baton Rouge
STATE: LA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5
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63.0%; Score 46; DB 13;
Best Local Similarity 75.0%; Pred. No. 5.8;
Matches 6; Conservative 0; Mismatches 2.
                                NAME: NUMBER: 33451
REGIGTRATION NUMBER: 33451
REFRENCE/DOCKET NUMBER: 9703P-US
TELEPHONE: (225) 387-3221
TELEPHONE: (225) 346-8049
INFORMATION FOR SEQ ID NO: 31:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
TYPE: amino acid
TYPE: mino acid
TYPE: mino acid
TYPE: mino acid
TYPE: mino acid
TYPE: minot acids
TYPE: TYPE: peptide
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 32, Application US/10109331 Publication No. US20020165159A1 GENERAL INFORMATION:
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ATTORNEY/AGENT INFORMATION
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CURRENT APPLICATION DATA:

FILING DATE: 28-Mar-2002

CLASSIFICIATION NUMBER: US/10/109,331

FILING DATE: 28-Mar-2002

CLASSIFICIATION NUMBER: US/09/297,989

FILING DATE: CURROWA-

APPLICATION NUMBER: US/09/297,989

FILING DATE: CURROWA-

APPLICATION NUMBER: US/09/297,989

FILING DATE: CURROWA-

APPLICATION NUMBER: 33451

REGISTRATION NUMBER: 33451

REFERENCE/DOCKET NUMBER: 9703P-US

TELEFONMUNICATION INFORMATION:

SEQUENCE CHARACTERISTICS:

SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  63.0%; Score 46; DB 13; Length 10; 75.0%; Pred. No. 5.8; 2; Indels :ive 0; Mismatches 2; Indels
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Publication No. US20020165159A1

GENERAL INFORMATION:

APPLICANT: McCann, Samuel M.

TITLE OF INVENTION: FSR-Releasing Peptides

NUMBER OF SEQUENCES: 41

CORRESPONDENCE ADDRESS:

ADDRESSEE: John H. Runnels

STREET: Baton Rouge

STATE: LA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/109,331
PILING DATE: 28-Mar-2002
CLASSIFICATION: CURROWN>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/297,989
FILING DATE: CURROWN>
                                                                                                                    COMPUTER: IBM PC Compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                          ZIP: 70821-2471
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 10 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
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Best Local Similarity 75.0
Matches 6; Conservative
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RESULT 50
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Sequence 35, Application US/10170096A
Sequence 35, Application US/10170096A
Sequence 35, Application Workson Wor
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63.0%; Score 46; DB 15; Length 10;
Best Local Similarity 75.0%; Pred. No. 5.8;
Matches 6; Conservative 0; Mismatches 2; Indels
                                                                                                                                                       Score 46; DB 13; Length 10;
Pred. No. 5.8;
0; Mismatches 2; Indels
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COGANISM: lamprey
COGANISM: lamprey
FEATURE:
NAME/KEY: MISC_FEATURE
COTHER INFORMATION: X at position 1 = pGlu
FEATURE:
NAME/KEY: MISC_FEATURE
COTHER: INFORMATION: X at position 10 = Gly-NH2
COTHER: INFORMATION: X at position 10 = Gly-NH2
US-10-170-096A-35
; SEQUENCE DESCRIPTION: SEQ ID NO: 32:
US-10-109-331-32
                                                                                                                                                                   Query Match 63.0%;
Best Local Similarity 75.0%;
Matches 6; Conservative (
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Search completed: March 2, 2004, 19:30:04 Job time : 31 secs

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Ubiquitin
LHRH pept
LHRH Pept
LHRH PEPT

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                                                                protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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Mammalian Luteinisi Gonadorel GnRH-II a

Non-cross Luteinisi Hormone d LHRH targ Gonadotro GnRH-II t

Native ma Luteinisi Gonadotro Human LHR Amino aci Luteinisi Gonadotro GnRH mono Luteinisi

Gonadotro

Luteinisi Mammalian Gonadorel

Aaw83360
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Aay88385
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Aab71951 GnRH pept Aab78483 Core poly Aab78159 Core poly Ab020516 Viral cor Abb02782 Viral cor Abb01166 Viral DP1	Abb02817 Viral cor Aau13712 Dp178-lik Ade02636 Hybrid po Ade02802 Hybrid po Abp71140 Native lu	Aawozz/o beuceinio Aar44954 E. coli f Aaw21364 Gonadolib Aar44953 E. coli f Abp96303 Gonadotro	Aar44955 E. coli f Aar44956 E. coli f Aay89761 Core poly Aav89789 Core poly	Aay89788 Core poly Aay89763 Core poly Aay89762 Core poly Aab78164 Core poly	Aab78162 Core poly Aab78190 Core poly Aab78189 Core poly Aab78163 Core poly	Abb02621 Viral cor Abb01197 Viral DP1 Abb02645 Viral cor	Abboll70 Viral Dri Abboll71 Viral Dri Abb02620 Viral Cor Abb01196 Viral DP1	Abboll69 Viral DP1 Abbo2619 Viral cor Abbo2646 Viral cor xr, r, r	Adulatio DE170-110 Adula715 DP178-110 Adula743 DP178-110 Adula717 DP178-110	Aau13742 DP178-lik Ade02639 Hybrid po Ade02641 Hybrid po	Ade02645 Hybrid po Ade02665 Hybrid po Aay31174 Ubiquitin Aab71945 GnRH dime	Abb76104 Gonadotro Abb76117 S4A-GnRH-	Aab78161 Core poly Abb02618 Viral cor	ADDULL68 VIKAL DEL Aau13714 DP178-lik Ade02638 Hybrid po	Aay89759 Core poly Aab78160 Core poly	Abb0167 Viral Cor Abb01167 Viral DP1 Aan13713 DP178-1ik	Aaw76376 Rat hecat Aay03858 Amino aci	Aay03859 Amino aci Aaw84281 Hecate ly	Aawa4z80 Gnkh norm Aay31183 Ubiquitin Aab71954 GnRH sequ	Aay31182 Ubiquitin Aab71953 GnRH sequ	Aaw03944 GnRH 4-re Aaw79567 GnRH-2. 1
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Aar62722 LHRH-cont Aar11181 Plasmid p Aar11176 Plasmid p Aar11180 Plasmid p Aar11182 Plasmid p Aar11184 Plasmid p 322	Plasmid p Plasmid p Plasmid p Plasmid p	Plasmid p Plasmid p BHV-1 tru BHV-1 tru	Juna Cetz Sequence Sequence	sequence LHRH anal LHRH anal LHRH anal	LHRH anal Chicken (Dogfish G	Salmon go Chicken I Salmon lu	Chicken 1 Hormone d AnRH-II a Gonadotro	Chicken G Luteinisi Luteinisi	Gonadotro Gonadotro Ghicken 1 Salmon lu	Chicken I Salmon go Dogfish g	Salmon go Chicken g Oogfish g	Salmon lu	Chicken g Linker-ch Luteinisi	Chicken g Gonadotro Bacifich	Seabream Seabream	H. burton Gonadotro	Gonadocro Rat modif GNRH-1 no	Peptide h Amino aci	Ubiquitin Modified Core poly	Core poly Gonadotro	Gnew anal
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Gaps

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Zohar Y,

(DYVI-)

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The present invention describes gonadotropin releasing hormones (GnPH) muGnEH I (ADA88923) and muGnEH II (ADA88924), isolated from Indian Murrel (Eigh. They can be used for inducing breeding in fishes both in combination and alone by activating production of gonadotropin. The GnRH peptide muGnEH I and muGnEH II have the amino acid sequences Gln-His-Trp-Gal-Aleu-Pro-Gly (I) and Gln-His-Trp-Ser-Trp-Gly-III-Leu-Pro-Gly (II), respectively. Also described: (I) isolating and sequencing muGnEH I and muGnEH II; and (2) inducing breeding in fishes using GnEH comprisating exposing fishes to GnEH to help release gonadotropin, and inducing breeding in fishes using the gonadotropin, and inducing breeding in fishes using the gonadotropin, and the resents a GnEH amino acid sequence given in the exemplification of the
combination and alone by activating production of gonadotropin. The GnRH peptide muGnRH I and muGnRH II have the amino acid sequences Gln-His-Trp-Ser-Ala-Trp-Arg-Leu-Pro-Gly (I) and Gln-His-Trp-Ser-Trp-Gly-Ile-Leu-Pro-Gly (II), respectively. Also described: (I) isolating and sequencing muGnRH I and muGnRH II; and (2) inducing breeding in fishes using GnRH comprising exposing fishes to GnRH to help release gonadotropin, and inducing breeding in fishes using the gonadotropin. The present sequence represents a GnRH amino acid sequence given in the exemplification of the
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                                                                                                                                                                                                                  Seabream gonadotropin-releasing hormone (AAR97757), sbGnRH, influences the release of gonadotropins by the pituitary gland in fish. The sbGnRH precursor is obtd. by expression of a cDnA clone (AAR30666) isolated from seabream brain. sbGnRH or its analogues (see also AAR97750) may be administered to fish (e.g. by injection, implantation, dissolving in water or orally in feed) to induce gonadal development, or to induce and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 hormones (GnRH)
from Indian Murrel
both in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gonadotropin releasing hormone; GnRH; muGnRH I; muGnRH II; Indian Murrel; fish, fish breeding; gonadotropin.
                                                                                                                        Novel geabream gonadotropin-releasing hormone and its analogues - useful for controlling gonadal development and spawning in fish.
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                                                                                                                                                                                 Claim 13; Page 51; 63pp; English.
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Score 45; DB 6; Length 10; Pred. No. 0.1; 0; Mismatches 3; Indels

90.0%;

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Regulating activity of a T-cell population by providing a molecule that is capable of modifying an activity or expression level of GnRH-I or GnRH-II receptor to regulate GnRH-I or a GnRH-II mediated activity of the T-cell population.
                                                                                                                                                                                                                                    Gonadotropin releasing hormone; GnRH-I; GnRH-II; T-cell related disease; congenital immune deficiency; acquired immune deficiency; hyperreactive; psychopathology; neoplastic disease; autoimmune disease; neuroprotective; pathopsychological disease; neurological disease; allograft rejection; graft-versus-host disease; allograft rejection; cytostatic; anti-HIV; allergic; gene therapy; pejerrey.
                                                                                                                                                                                                                  Pejerrey gonadotropin releasing hormone (pjGnRH) peptide.
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                                                                                                                                                  AAO31037 standard; peptide; 10 AA.
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(first entry)

'note= "Pyroglutamic acid" /note= "C-terminal amide"

Sequence 10 AA

Location/Qualifiers

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The invention relates to a method for regulating activity of a T-cell population. The method comprising providing to the T-cell population a molecule that is selected to be capable of modifying an activity or expression level of a gonadotropin releasing hormone (GnRH)-I or a GnRH-II mediated activity of a T-cell population. The method is useful for treating or preventing a T-cell population. The method is useful for treating or preventing a T-cell related disease or condition characterised by abnormal T-cell activity, e.g. congenital immune deficiencies, acquired immune deficiencies, infection, psychopathology or neoplastic disease, autoimmune, allergic, hyperreactive, pathopsychological and neurological diseases and conditions, graft-versus-host disease, or allograft rejections. The invention is useful in gene therapy. The present sequence is herring conditions of the conditions o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gonadotropin releasing hormone; GnRH-I; GnRH-II; T-cell related disease; congenital immune deficiency; acquired immune deficiency; hyperreactive; psychopathology; neoplastic disease; autoimmune disease; neuroprotective; pathopsychological disease; neurological disease; allograft rejection; graft-versus-host disease; allograft rejection; cytostatic; anti-HIV; allergic; gene therapy; herring.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Regulating activity of a T-cell population by providing a molecule that is capable of modifying an activity or expression level of GRRH-I or GRRI-II receptor to regulate GRRH-I or a GRRH-II mediated activity of the T-
                                                               Gaps
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                                                               3; Indels
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Score 45; DB 6;
Pred. No. 0.1;
), Mismatches
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      Query Match
Best Local Similarity 70.0%;
Matches 7; Conservative
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(first entry)
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                                                                                                                           1 EHWSXGXXPG 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           to standardise OS
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06-OCT-2003
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Gaps

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Indels

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ed. No. 0.1; Mismatches

Pred. No.

70.08;

Similarity 70.07; Conservative

Best Local Matches

10

1 EHWSXGXXPG

EHWSYGLSPG 10

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Gaps

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The invention relates to a method for regulating activity of a T-cell population. The method comprising providing to the T-cell population a molecule that is selected to be capable of modifying an activity of expression lavel of a gonadotropin releasing hormone (GnRH)—I or a GnRH—I mediated activity of a T-cell population. The method is useful for treating or preventing a T-cell related disease or condition characterised by abnormal T-cell activity, infection, psychopathology or neoplastic disease, acquirred immune deficiencies, acquirred immune deficiencies, hyperreactive, pathopsychological and neurological diseases and conditions, graft-versus—host disease, a light rejections. The invention is useful in gene therapy. The present sequence is sea bream gonadotropin releasing hormone (sbGnRH) peptide
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                                                                                                                                                                                                                                                                                                      Gonadotropin releasing hormone, GnRH-I; GnRH-II; T-cell related disease, congenital immune deficiency; acquired immune deficiency; hyperreactive; psychopathology; neoplastic disease, autoimmune disease; neuroprotective; pathopsychological disease; neurological disease; allograft rejection; graft-versus-host disease; allograft rejection; cytostatic; anti-HIV; allergic; gene therapy; sea bream.
                                                                                                                                                                                                                                                                           Sea bream gonadotropin releasing hormone (sbGnRH) peptide.
 Length 10;
                               3; Indels
Score 45; DB 6;
Pred. No. 0.1;
0; Mismatches
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                                                                                                                                                                            AAO31036 standard; peptide; 10
 90.0%;
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Query Match
Best Local Similarity
Matches 7; Conserv
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Modified-site
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90.0%; Score 45; DB 6; Length 10;

Query Match

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The present sequence is that of an alanine-replacement peptide of a mammalian gonadotropin releasing hormone I (GnRH-I) tandem repeat peptide (see ABB76113) The GnRH-I-tandem repeat, and alanine-replacement derivatives of it (see ABB76114-23), were dimerised and conjugated to ovalbumin. The peptides were tested for efficacy for immunocastration of pigs. High efficacy for the present L7A peptide. Preferred modified, GnRH-I moderate efficacy for the present L7A peptide. Preferred modified, GnRH-I candem peptides (see ABB76100-02) are used in vaccines to reduce testis growth and to reduce testosterore to non-detectable levels. A single dose of a claimed vaccine is effective for the immunocastration of pigs. Ovacines comprising the modified GnRH-I rendem peptides can also be used to alter the reproduction or behaviour of a mammal, e.g. to sterilise to alter the reproduction or behaviour of a mammal, e.g. to sterilise comestic animals being fattened for slaughter, and to improve meat quality in pigs. The peptide gives an immunogenic response that callows for effective discrimination between GnRH-I and GnRH-II. In the humans, immunisation against GnRH, preferably selective against either GnRH-I or GnRH-II, could be used in the treatment of prostate cancer (claimed), breast cancer and some forms of pituitary carcinoma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Peptide for treating prostate cancer and immunocastration, comprises modified gonadotrophin releasing hormone decapeptide sequence which allows for immunogenia response that allows for discrimination between different types of GnRH.
                                                                                                                                                  Gonadotropin releasing hormone; GnRH; vaccine; prostate cancer; immunocastration; cytostatic; anabolic.
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ABB76120 standard; peptide; 21 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12-SEP-2000; 2000US-00659983
                                                                             (first entry)
                                                                                                                   L7A-GnRH-tandem peptide.
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                                                                           15-JUL-2002
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                                     ABB76120;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Peptide for treating prostate cancer and immunocastration, comprises modified gonadotrophin releasing hormone decapeptide sequence which allows for immunogenic response that allows for discrimination between different types of GnRH.
                                                Gaps
                                                                                                                                                                                                                                              vaccine; prostate cancer;
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                       Length 21;
                                              3; Indels
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                       DB 5;
0.21;
                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                      "C-terminal amide"
                                                                                                                                                                                                                                           Gonadotropin releasing hormone; GnRH; vinmunocastration; cytostatic; anabolic.
                       Score 45;
Pred. No.
                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
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                                                                                                                                                   ABB76118 standard; peptide; 21 AA.
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                       90.08;
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                                 Similarity 70.07; Conservative
                                                                                                                                                                                                                      YSA-GnRH-tandem peptide.
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                                                                    1 EHWSXGXXPG 10
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Sequence 21 AA;
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Matches 7,
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                                                                                                                                                                                                                   Gaps
GnRH-I or GnRH-II, could be used in the treatment of prostate cancer (claimed), breast cancer and some forms of pituitary carcinoma
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                                                                                                                                                    Score 45; DB 5;
Pred. No. 0.21;
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                                                                                                                                                       90.0%;
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Best Local Similarity
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                                                                                            Sequence 21 AA;
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Gaps ö

Score 44; DB 1; Length 10; Pred. No. 0.15;); Mismatches 3; Indels

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1 EHWSXGXXPG 10

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compositions may also contain antiandrogens. See AAP10411-P10418. (Updated on 01-JUL-2002 to add missing PI field.) (Updated on 10-MAR-2003 to add missing OS field.) (Updated on 25-MAR-2003 to correct PA field.)
                                                              Query Match
Best Local Similarity 70.0%;
Matches 7; Conservative
                                          Sequence 10 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A composition is claimed containing LHRH or its analogues. The composition is used to treat prostate adenocarcinoma, benign hypertrophy of the prostate, endometriosis, dymenorrhea, hisutism. hormonedependent memmary tumours, for treatment or prevention of precocious puberty, delaying the onset of puberty and for treating acne. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 'note= "amidated or absent, in which case Pro(9) is Pro-
 meat quality in pigs. The peptide gives an immunogenic response that allows for effective discrimination between GhRH-1 and GhRH-II. In humans, immunisation against GhRH, preferably selective against either GhRH-I or GhRH-II, could be used in the treatment of prostate cancer (claimed), breast cancer and some forms of pituitary carcinoma
                                                                                                                                                                                                                                                                                                                    LHRH; Follicle Stimulating Factor; FSH; acne; hirsutism; dysmenorrhea; prececious puberty; endometriosis; prostate cancer; benign prostate hypertrophy; mammary tumour.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  and its agonists compsn. - u hypertrophy of the prostate,
                                                                                                         Gaps
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                                                                                   5; Length 21;
                                                                                                         3; Indels
                                                                                                                                                                                                                                                                                                  Luteinising Hormone Releasing Hormone analogue #5.
                                                                                  90.0%; Score 45; DB 5; 70.0%; Pred. No. 0.21; iive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                            'note= "N-alpha-methyl-Leu"
                                                                                                                                                                                                                                                                                                                                                                                                                               'note= "pyroglutamic acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LH-RH, liberating factor for LH and FSH, to treat prostate adenocarcinoma, benign hirsutism, acne, etc.
                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 1(f); Page 16; 27pp; French.
                                                                                                                                                                                                     AAP10416 standard; peptide; 10 AA
                                                                                                                                                                                                                                                                                                                                                                                                                  label= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                  label= OTHER
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                                                                                                                                                                                                                                                                               (first entry)
                                                                        Query Match
Best Local Similarity 70...
Fest Local 5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NH-C2H5"
                                                                                                                                                                                                                                             (revised)
(revised)
(revised)
                                                                                                                             1 EHWSXGXXPG 10
                                                                                                                                               EHWSYGLAPG 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Labrie F, Raynaud J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1981-23409D/14.
                                                               Sequence 21 AA;
                                                                                                                                                                                                                                                                                                                                                                                               Key
Modified-site
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                                                                                                                                                                                                                                                       10-MAR-2003
01-JUL-2002
17-DEC-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21-SEP-1979;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21-SEP-1979;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19-MAR-1981.
                                                                                                                                                                                                                                              25-MAR-2003
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                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
                                                                                                                                                                                                                          AAP10416;
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A composition is claimed containing LHRH or its analogues. The composition is used to treat prostate adenocarcinoma, benign hypertrophy of the prostate, endometriosis, dymenorrhea, hirsutism, hormone-dependent mammary tumours, for treatment or prevention of preoccious puberty, delaying the onset of puberty and for treating acne. The compositions may also contain antiandrogens. See also AAP10412-P10418. (Updated on 0-JUL-2002 to add missing PI field.) (Updated on 10-MAR-2003 to add missing PI field.) correct PA field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  nseq
                                                                                                                                                                                                                                                                                                                                                                                                                          LHEH; Follicle Stimulating Factor; FSH; acne; hirsutism; dysmenorrhea; precocious puberty; endometriosis; prostate cancer;. benign prostate hypertrophy; mammary tumour.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LH-RH, liberating factor for LH and FSH, and its agonists compsn. - uto treat prostate adenocarcinoma, benign hypertrophy of the prostate, hirsutism, acne, etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 10;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       'note= "pyroglutamic acid"
                                                                                                                                                                                                                                                                                                                                                                             Luteinising Hormone Releasing Hormone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                  AAP10411 standard; peptide; 10 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1(a); Page 15; 27pp; French.
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(revised)
(revised)
1 EHWSYGLRPG 10
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01-JUL-2002
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                                                                                                                                                                                       AAP10411;
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                                                                            RESULT 11
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AAP50512;

RESULT 12 AAP50512

ઠે 셤 Synthetic.

SOCCOCC

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The analogues of the invention are useful for controlling ovulation in fish, birds and mammals. They have higher activity than their natural counterparts. (Updated on 10-MAR-2003 to add missing OS field.) (Updated on 25-MAR-2003 to correct PA field.)
                                                                                                                                                                                                                                                                                                                                                                                                                New gonadoliberin analogues - useful for ovulation control in fish birds and mammals.

    .9
/note= "also claimed with modified Pro(9) (=Pro-EA)"

                                                                  Hormone; reproduction; fertility; contraception; ovulation.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 88.0%; Score 44; DB 1; Length 10; 70.0%; Pred. No. 0.15; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gonadotrophin release stimulating hormone.
                                                                                                                                                                                                                                                                                                                                          (INNO-) INNOVACIOS ALAP.

(KERT-) KERTZBUTE.
                                                                                                                                 Location/Qualifiers
                                       Sequence of gonadoliberin analogue.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAP50222 standard; protein; 10 AA.
                                                                                                                                                                                    label= pyroGlu
                                                                                                                                                                                                             /label= Gly-NH2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 2; Page 25; 29pp; French.
                                                                                                                                                                                                                                                                                          84BE-00901307.
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                                                                                                                                                                                                                                                                                                                     83HU-00004458
 (revised)
(first entry)
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Best Local Similarity 70.0
Matches 7; Conservative
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                                                                                                                                                                       Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 10 AA;
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 10-MAR-2003
01-NOV-1991
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20-JAN-1992
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                                                                                           Vertebrata.
Synthetic.
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                                                                                                                                              Protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The analogues of the invention are useful for controlling ovulation in fish, birds and mammals. They have higher activity than their natural counterparts. (Updated on 10-MAR-2003 to add missing OS field.) (Updated on 25-MAR-2003 to correct PA field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New gonadoliberin analogues - useful for ovulation control in fish birds and mammals.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
               Gaps
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                                                                                                                                                                                                                                                                Hormone; reproduction; fertility; contraception; ovulation.
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               3; Indels
 Pred. No. 0.15;
); Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (VALT-) KOEZPONTI VALTO ES HITELBANK RT.
(INNO-) INNOVACIOS ALAP.
(KERT-) KERTZBUTE.
                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                     Sequence of gonadoliberin analogue.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAP50513 standard; protein; 10 AA.
                                                                                                                                AAP50512 standard; protein; 10 AA
                                                                                                                                                                                                                                                                                                                                                        label= pyroGlu
                                                                                                                                                                                                                                                                                                                                                                                    /label= Gly-NH2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 2; Page 25; 29pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                84BE-00901307.
70.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          83HU-00004458
                                                                                                                                                                                  (revised)
(revised)
(first entry)
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Best Local Similarity 70.0
               Conservative
                                                            EHWSYGLRPG 10
                                       1 EHWSXGXXPG 10
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 Best Local Similarity Matches 7; Conserv
                                                                                                                                                                                                                                                                                                                                             Misc-difference
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10-MAR-2003
01-NOV-1991
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                                                                                                                                                                                                                                                                                          Vertebrata.
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AAP50513;

RESULT 13
AAP50513
ID AAP50
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AC AAP50
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DT 25-MA

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Gaps

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The gonadotropin releasing hormone and its analogues are prepd. by a new multistage rapid peptide synthesis method in soln, where the intermediates are not isolated. The process is rapid and gives very pure peptide quickly and using little equipment. The peptide can be used in veterinary medicine to synchronise ovulation in large animal hards, and in human medicine in the treatment of fertility disorders. (Updated on 09 jAN-2003 to add missing OS field.) (Updated on 25-MAR-2003 to correct PA
(Updated on 31-OCT-2002 to add missing OS field.) (Updated on
                                                                                                                                                                                                                                                                                                                                                                                                                      Gonadotropin releasing hormone; analogue; peptide synthesis; ovulation; veterinary medicine; fertility.
                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Prepn. of gonadotropin liberating hormone and analogues - by mult rapid peptide synthesis in soln. without isolating intermediates.
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                                                                             Length 10
                                                                                                             3; Indels
                                                                             DB 1;
                                                                                             0.15;
                                                                            Score 44; DB 1
Pred. No. 0.15;
0; Mismatches
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                                                                                                                                                                                                                                                         AAP61403 standard; protein; 10 AA.
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             25-MAR-2003 to correct PA field.)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WISSENSCHAFTEN DDR
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                                                                          88.0%;
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                                                                                                             Conservative
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Best Local Similarity
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les 7; Conserv
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                                              Sequence 10 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unidentified
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Matches
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AAP60576
ID AAP60
                                                                                                             Matches
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                                                                                                                                                                                                                                  The claimed peptide antagonists inhibit the release of gonadotrophins and/or steroids. They are antagonistic to GRRH, inhibit ovulation, and may cause resorption of a fertilised egg if administered shortly after absorption. The peptides also have utility in male contraception, and in treatment of precoscious puberty, hormone dependent neoplasia, dysmenorrhoea and endometriosis. (Updated on 25-MAR-2003 to correct PA
                                                                                                                                                      New GnRH antagonist peptide(s) - useful as inhibitors of gonadotropin(s) and/or steroid(s) for contraceptive use.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The decapeptide encodes a gonadoliberin antagonist, which may be used as a male contraceptive and as an antitumour (against steroid-dependent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New peptide gonadotropin releasing hormone antagonists - useful esp. as contraceptives, for treating early puberty, hormone-dependent neoplasms
                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
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                                                                                                                                                                                                                                                                                                                                                                                                       Score 44; DB 1; Length 10; Pred. No. 0.15;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Struthers RS,
                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                         (SALK ) SALK INST BIOLOGICAL STUDIES
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                                                                                                                                                                                                        Disclosure, Page 1, 20pp, English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAP60127 standard; peptide; 10 AA
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                                                                                           Vale WW
            83US-00556148.
85US-00771517.
                                                                                                                                                                                                                                                                                                                                                                                                   88.0%;
70.0%;
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(revised)
(first entry)
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Rivier CL, Vale WW;
                                                                                           Rivier JE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 EHWSXGXXPG 10
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Best Local Similarity
7; Conserve
                                                                                                                         WPI; 1985-136434/23.
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                                                                                                                                                                                                                                                                                                                                                                        Sequence 10 AA;
          29-NOV-1983;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25-MAR-2003
31-OCT-2002
12-JUN-1991
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                                                                                           Roeske RW,
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Claim 8; Page 10; 10pp; English
85US-00790031.
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                                                                                                                                                                                    Local Similarity 70.0
hes 7; Conservative
                              Ω̈́
                                                                                                                                                                                                            1 EHWSXGXXPG 10
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                             Almquist RG, Olsen
                                              WPI; 1987-334627/47.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1988-049675/07.
                                                                                                                                                                                                                                                                                                                    LHRH analogue no.
              (STRI ) SRI INT.
                                                                                                                                                              Sequence 10 AA;
22-OCT-1985;
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Matches
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                                                                                                                                                                                                                          Peptide inhibits the release of lutenising hormone releasing hormone. See also AAP60575. (Updated on 25-MAR-2003 to correct PA field.)
                                                                                                                                                                                                                                                                                                                                                                                                              LHRH; contraception; precocious puberty; endometriosis; breast tumours; prostate tumours; ectopic tumours; menopause.
                                                                                                                                                                                                                                                                                Gaps
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/label= other
/note= "other= ketomethylene(Gly), dihydroketo-
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Pred. No. 0.15;
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|label= other
|note= "other= pyroglutamic acid"
                                             Novel decapeptide with LHRH inhibition activity.
                                                            Lutenising hormone releasing hormone activity.
                                                                                                                                                                                                                                                                                                                                                                                                Luteinising hormone releasing hormone agonist.
                                                                                                                                                                                                          Disclosure; Page 990; 5pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
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(TULA ) TULANE EDUCATIONAL FUND.
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                      (revised)
(first entry)
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                                                                                                                                                                                                                                                                                              1 EHWSXGXXPG 10
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Best Local Similarity
Matches 7; Conserv
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Modified-site
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                     25-MAR-2003
27-OCT-1991
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        AAP60576;
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This luteinising hormone releasing hormone (LHRH) agonist has either a ketomethylene or dihydroketomethylene gp. replacing the amide linkage between residues 9 and 10 in LHRH. This results in an increase in oral activity. It is useful for eg male and female contraception, treatment of preoccious puberty and endo-metriosis and treatment of breast- and prostate tumours. See also AAP70923-27
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Orally active luteinising hormone-releasing hormone peptide analogues have keto:methylene or hydroxy:ethylene in place of amide between proline(9) and glycine(10).
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The peptide was synthesized with D-amino acids. It will be useful for hypogonadotropic hypogonadal men, male infertility; precocious puberty; and mammary and prostatic carcinomas. It will also be useful for development of assay for veterinary medicine. See also AAP81573-82. (Updated on 25-MAR-2003 to correct PA field.) (Updated on 25-MAR-2003 to
                                                                                                                                                                                                                                                                                                                                                                    Deca:peptide luteinising hormone releasing hormone analogues - contain natural amino acids and have high activitles for releasing luteinising hormone and FSH.
                                                                           Luteinising hormone releasing factor; follicle stimulating hormone;
fertility; precocious puberty; mammary carcinoma; prostatic carcinoma.
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                                                                                                                                                                                                                                                                                                            Tang PFL, Kubota M;
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Best Local Similarity 70...
7, Conservative
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                                             LHRH analogue no.
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                  10-OCT-1990
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10-OCT-1990
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                                                                                                                         Synthetic.
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                                                         Score 44; DB 1; Length 10;
Pred. No. 0.15;
0; Mismatches 3; Indels
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70.0%;
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Best Local Similarity 70.0%;
Matches 7; Conservative
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(first entry)
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Best Local Similarity 70.0
7, Conservative
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                                                                                                                       1 EHWSXGXXPG 10
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correct PI field.)
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                             Sequence 10 AA;
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10-OCT-1990
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RESULT 21 AAP81575 ID AAP81 XX AC AAP81

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98.0%;
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Best Local Similarity 70.0
Matches 7; Conservative
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Matches 7; Conservative
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14-JUN-1989
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                                                                                                                                              The peptide was synthesized with D-amino acids. It will be useful for hypogonadotropic hypogonadal men, male infertility; precocious puberty; and mammary and prostatic carcinomas. It will also be useful for development of assay for veterinary medicine. See also AAP81573-82. (Updated on 25-WAR-2003 to correct PA field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The peptide was synthesized with D-amino acids. It will be useful for hypogonadctropic hypogonadal men, male infertility; precocious puberty; and mammary and prostatic carcinomas. It will also be useful for development of assay for veterinary medicine. See also AAP81573-82. (Updated on 25-MAR-2003 to correct PA field.) (Updated on 25-MAR-2003 to
                                           Deca:peptide luteinising hormone releasing hormone analogues - contain natural amino acids and have high activities for releasing luteinising hormone and FSH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Decaipeptide luteinising hormone releasing hormone analogues - contain natural amino acids and have high activities for releasing luteinising hormone and FSH.
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Pred. No. 0.15;
0; Mismatches 3; Indels
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    Kubota
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    Tang PFL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 7; Page 10; 10pp; English.
                                                                                                                      Claim 5; Page 10; 10pp; English.
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                                                                                                                                                                                                                                                                                       88.0%;
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(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (TEXA ) UNIV TEXAS SYSTEM
                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 70.0
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bowers CY,
   Bowers CY,
                                                                                                                                                                                                                                                                                                                                                 1 EHWSXGXXPG 10
                                                                                                                                                                                                                                                                                                                                                                            1 EHWSYGLYPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LHRH analogue no. 7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1988-049675/07.
                              WPI; 1988-049675/07
                                                                                                                                                                                                                                                          Sequence 10 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26-AUG-1985;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25-MAR-2003
10-0CT-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US4721775-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26-JAN-1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Folkers K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic
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RESULT 23

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Compsn. comprising LHRH-antagonist and 19-nor-progestational agent - fc
treating female gynaecological disorders based on gonads steroid prodn.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                         Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Luteinizing hormone releasing hormone (LHRH); LHRH antagonist;
19-nor-progestational agent; female gynaecological disorders.
Score 44; DB 1; Length 10; Pred. No. 0.15; 3; Indels 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          88.0%; Score 44; DB 1; Length 10; 70.0%; Pred. No. 0.15; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence of luteinizing hormone releasing hormone (LHRH).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 2; 31pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAR15713 standard; protein; 10 AA.
                                                                                                                                                                                                                                                                                                                                                                         AAP90630 standard; protein; 10 AA.
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(first entry)
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AAR15713
ID AAR15
XX
AC AAR15
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possesses high anticoulatory and antinoplastic activity, is free of anaphylactoid side effects and is believed to be free of endematogenic effects. The peptide may be used to treat precocious puberty, hormone dependent tumours, e.g. malignant and benign prostate tumours, e.g. secondary amenorrhoea, endometriosis and ovarian and mammary cystic diseases. The peptide is also useful for regulating ovulation e.g. as precocial or postcoital contraceptives, for synchronising oestrus in livestock and for improving the "thythm" method. It is also useful for regulating the human menopausal gonadotropin, follicle stimulating and LH levels during premenopausal and postmenopausal periods. As it suppresses the spermatogenesis and testosterone levels in males, it may be of potential use for male contraception. See also AAR26818, AAR29046-7. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                    New deca:peptide luteinising hormone-releasing hormone antagonists - for treating precocious puberty, hormone dependent tumours, endometritis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The decapeptides is an antagonistic analogue of hypothalamic LHRH which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Helper T cell epitope; universal immune stimulator; invasin; hapten; vaccine; LHRH; luteinising hormone releasing hormone; prostate; androgen-dependent carcinoma; antitumour; infertility.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LHRH hapten for attachment to universal immune stimulator.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 44; DB 2; Length 10;
Pred. No. 0.15;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                          treating precocious puberty, hormone de
cystic diseases, also as contraceptive.
                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure, Page 1; 43pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAR62689 standard; peptide; 10 AA.
                                                                                                                                                                                                                                                                                                                                                             Schally AV;
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/note= "amidated"
                                                                                                                                                                                                                                                                                                                       (TULA ) TULANE EDUCATIONAL FUND.
                                                                                                                                                                                                                                                                                  91US-00647786.
                                                                                                                                                                                                                                            92WO-US000776.
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                                                                                          /label= pGlu
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(first entry)
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                                                                                                                                                                                                                                                                                                                                                           Juhasz A,
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                                                        Key
Misc-difference
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                                                                                                             Modified-site
                                                                                                                                                                                                                                                29-JAN-1992;
                                                                                                                                                                                                                                                                                    10-JAN-1991;
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                                                                                                                                                                     WO9213883-A1
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10-SEP-1995
                                                                                                                                                                                                          20-AUG-1992.
                                                                                                                                                                                                                                                                                                                                                             Janaky T,
                    Synthetic.
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Best Local
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Matches
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AAR62689
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The C-terminal residue (Gly-CO-NH2) can be replaced by ethylamide. This peptide and framents of it (i.e. amino acids 4-10, 5-10, 6-10 and 7-10) are agonists and antagonists of LHRH. They are useful for treating e.g. precocious or delayed puberty, psychiatric disorders esp. those of the libido or sexual aggression, etc. In addition they are useful for functional exploration of the hypothalamus hypothyseal axis and for radioimmunological or biological assay (of LH, FSH and steroid levels) in biological fluids and biopsy samples. (Updated on 25-MAR-2003 to correct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New peptide homologous with luteinising hormone-releasing hormone - used to treat gynaecological conditions, cancer of gonads and sec. sexual organs, psychiatric conditions and in assays.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Luteinising hormone, LHRH; hypothalamic; antiovulatory; tumours; antineoplastic; precocious puberty; ovulation; contraceptive.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bauer K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (INRM ) INSERM INST NAT SANTE & RECH MED.
                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAR26819 standard; peptide; 10 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gautron J, Pattou E, Kordon C,
                                                      Peptide #1 with homology to LHRH
                                                                                                                                                                                                                              'note= "pyroGlu"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 3; Page 50; 83pp; French
                                                                                                                                                                                                          'label= OTHER
                                                                                                                                                                                                                                                                                                    label= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                        90FR-00005147,
                                                                                                                                                                                                                                                                label= Hyp
(revised)
(first entry)
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(first entry)
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Matches 7, Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 EHWSXGXXPG 10
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                                                                                                                                                                     Key
Modified-site
                                                                                                                                                                                                                                              Modified-site
                                                                                                                                                                                                                                                                                  Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                      23-APR-1990;
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10-FEB-1993
                                                                                                                                                                                                                                                                                                                                                                                                   31-OCT-1991.
25-MAR-2003
24-JAN-1992
                                                                                                                                                                                                                                                                                                                                                             WO9116343-A
                                                                                          luliberin.
                                                                                                                                 Synthetic
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Gaps

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Zamb T;

Wang CY,

Ladd AE,

(LADD/) LADD A E. (WANG/) WANG C Y. (ZAMB/) ZAMB T.

28-APR-1994; 27-APR-1993; 14-APR-1994;

10-NOV-1994

WPI; 1994-357910/44

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A new method is provided for preparing a decapeptide of formula pGlu-His-Trp-Ser-Tyr-Xaa-leu-Arg-Pro-Gly-NH2, in which a protected nonapeptide corresponding to the N-terminal of the peptide is first prepared on a benzhydrylamine resin, the Pro residue being attached to the resin via a photosensitive linker. The nonapeptide is cleaved from the resin by photolysis, the C-terminal is activated, and the product is coupled with glycinamide to add the Gly-NH2. The decapeptide is then deprotected. In the decapeptide, Xaa is Gly (giving gonadorelin; the present sequence), D
                                                                                                                                                                                                                                                                            Prepn, of luteinising hormone and follicle stimulating hormone releasing peptide(s) - by cleaving a protected nona-peptide resin by photolysis to remove the support, coupling with glycinamide and deprotecting.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gonadotropin releasing hormone; GnRH; gonadoliberin; reproduction; transgenic animal; transgenic fish; transgenic fowl.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New gonadotropin releasing hormone preprohormone DNA - used to oprods. for regulation of reproductive function and diagnosis of reproductive capacity and disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 44; DB 2; Length 10;
Pred. No. 0.15;
0; Mismatches 3; Indels
                                                                                                                                                 (BOEH ) BIO-MEGA/BOEHRINGER INGELHEIM RES INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (STRD ) UNIV LELAND STANFORD JUNIOR. (UYOR-) UNIV OREGON STATE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAR75152 standard; peptide; 10 AA.
                                                                                                                                                                                                                                                                                                                                                                   Claim 1; Page ?; 18pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gonadotropin releasing hormone.
                                                              88CA-00566195
                                                                                                        88CA-00566195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           88.0%;
70.0%;
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Best Local Similarity 70.0
Matches 7; Conservative
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                                                                                                                                                                                                                                    WPI; 1995-179260/24.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 10 AA;
                                                            06-MAY-1988;
                                                                                                        36-MAY-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       04-NOV-1994;
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                                                                                                                                                                                           Sauthier JA;
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à
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                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic immunogenic peptides are provided in which a universal immune stimulator is linked to a peptide or protein hapten containing B cell and/or cytotoxic T lymphocyte epitopes, giving a product which causes potent immune responses to the coupled peptide or protein. The stimulator consists of (A) a promiscuous helper T cell epitope (Th) which elicits an immune response to the coupled peptide in members of a heterogeneous immune response to the coupled peptide in members of a heterogeneous compulation expressing diverse HLA phenotypes, and (B) an adjuvant peptide sequence from the invasin protein of Yersinia. Spacer amino acid comains and between the immune stimulator and hapten components. When the hapten is LHRH, then optionally the invasin domain can be omitted from the immune stimulator and sequence represents an LHRH hapten which can be attached to the stimulator to provide a potent vaccine for treating e.g. prostatic hyperplasia, androgen-dependent carcinoma, prostatic carcinoma, testicular carcinoma, endometriosis, envere) premenstrual syndrome or oestrogen-dependent breast cancer, or for induction of infertility. (Updated on 25-MAR-2003 to correct PN field.)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                          Immunogenic luteinising hormone releasing hormone peptide(s) - that suppress LHRH activity in males and females.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                luteinising hormone releasing hormone; follicle stimulating; FSH; gonadorelin.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      'note= "pyroglutamic acid"
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                                                                                                                                                                                                                                                                                                                                                                                                           Claim 6; Page 104; 213pp; English.
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                                                              94WO-US004832
                                                                                                     93US-00057166
94US-00229275
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(first entry)

AAR91197;

RESULT 28

LHRH peptide 06-SEP-1996

Modified-site Modified-site

Synthetic.

CA1335403-C.

Local Similarity 70.0 1 EHWSXGXXPG 10 1 EHWSYGLRPG 10

Best Loc Matches

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Sequence 10 AA;

Query Match

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Gaps

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develop

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RESULT 30 AAR75153

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Gonadotropin releasing hormone, GRRH, motility disorder; functional bowel disease; leuptolide acetate; luteinising hormone; progesterone; relaxin; autonomic nervous system; drug delivery; therapy; irritable bowel syndrome; diabetes; scleroderma; Parkinson's disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8 Different forms of GRRH (given in AAR75152-59) have previously been isolated from vertebrate species. A precursor for an additional form of GRRH, (Ser8)-GRRH (AAR75151), has now been obtd. (Updated on 27-AUG-2003 to correct OS field.)
                                                                                                  Gonadotropin releasing hormone; GnEH; gonadoliberin; reproduction;
transgenic animal; transgenic fish; transgenic fowl.
                                                                                                                                                                                                                                                                                                                                                                                                             New gonadotropin releasing hormone preprohormone DNA - used to oprode. for regulation of reproductive function and diagnosis of reproductive capacity and disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2; Length 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 44; DB 2;
Pred. No. 0.15;
0; Mismatches
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                                                                                                                                                                                                                                                                                                       (STRD ) UNIV LELAND STANFORD JUNIOR. (UTOR-) UNIV OREGON STATE.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gonadotropin releasing hormone.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98.0%;
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                                                                                                                                                                                                                                                                           93US-00147771
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(first entry)
                                         (first entry)
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Best Local Similarity 70...
7; Conservative
                                                                          Catfish GnRH(5His,8Asn).
                                                                                                                                                                                                                                                                                                                                                       Fernald RD, Adelman JP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 EHWSHGLNPG 10
                             (revised)
                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1995-185526/24.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 EHWSXGXXPG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 10 AA;
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Modified-site
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Modified-site
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22-MAR-1996
                                                                                                                                                 Siluriformes
                            27-AUG-2003
19-DEC-1995
                                                                                                                                                                                  WO9512309-A1
                                                                                                                                                                                                                                             04-NOV-1994;
                                                                                                                                                                                                                                                                           05-NOV-1993;
                                                                                                                                                                                                               11-MAY-1995.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic
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AAR75155;
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AAR86845
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                                          8 Different forms of GRRH (given in AAR75152-59) have previously been isolated from vertebrate species. A precursor for an additional form of GRRH, (Ser8)-GRRH (AAR75151), has now been obtd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New gonadotropin releasing hormone preprohormone DNA - used to develop prode. for regulation of reproductive function and diagnosis of reproductive capacity and disease.
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                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                    Gonadotropin releasing hormone; GnRH; gonadoliberin; reproduction; transgenic animal; transgenic fish; transgenic fowl.
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                                                                                                                                   Score 44, DB 2; Length 10;
Pred. No. 0.15;
0; Mismatches 3; Indels
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                Disclosure; Fig la; 85pp; English.
                                                                                                                                       88.0%;
70.0%;
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Best Local Similarity 70.0
Matches 7; Conservative
                                                                                                                                   Query Match
Best Local Similarity 70.0
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Fernald RD, Adelman JP;
                                                                                                                                                                                                                                                                                                                                                                                                        Chicken (I) GnRH(8Gln).
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                                                                                                                                                                                                    1 EHWSXGXXPG 10
                                                                                                                                                                                                                                  1 EHWSYGLRPG 10
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                                                                                                         Sequence 10 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11-MAY-1995.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gallus sp.
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RESULT 31 AAR75155 ID AAR7 XX

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Gaps

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1 EHWSXGXXPG 10
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                                                                                                                                                                          (MERI ) MERCK & CO INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ictalurus punctatus.
                                                                                                                                                                                                                                        WPI; 1995-141218/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 10 AA;
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Modified-site
Modified-site
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                                                                                                             07-OCT-1994;
                                                                                                                                           .5-OCT-1993;
                                             GB2282812-A.
                                                                              19-APR-1995
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
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Matches
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                                                                                                                                                                                                                                                                                                                                                                     This sequence represents naturally occuring gonadotropin releasing hormone (GRRH). Analogues of GRRH are represented by AAR86946-56.

Motility disorders, including functional bowel disease, can be treated by the administration of one of the GRRH analogues shown here (e.g. production of reproductive hormones such as luteinising hormone, progesterone and relaxin. Motility disorders are caused from abnormalities of the autonomic nervous system. Due to this, the GRRH analogues are administered by injection (which may be intravenous, subcutaneous or intramuscular), or by a drug delivery system. The drug delivery system can comprise a drug implant with timed release, a nasal spray or an injection of a long-lasting depo form. This method is used to alleviate symptoms such as nausea, vomiting, abdominal pain and altered bowel habits. The sequences can be used to treat motility disorders in a wide variety of other diseases including irritable bowel syndrome, diabetes, scleroderma and Parkinson's disease. (Updated on 25-MAR-2003 to
                                                                                                                                                                                                                                                                        Treating motility disorders associated with systemic lupus erythematosus - by admin. of gonadotropin releasing hormone analogue, to control nausea, vomiting, abdominal pain etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cytotoxic receptor ligand scaffold; CRLS; pituitary; gonadotrophin; tumour development; breast cancer; prostatic cancer; steroid hormone; endometriosis; endocytosis; cell destruction; sterilisation; anabolic effect; testosterone; gonadotrophin releasing hormone; GnRH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 44; DB 2; Length 10;
Pred. No. 0.15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note= "Pyroglutamic acid"
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                                                                                                                                                                                                                                                                                                                                             Disclosure; Col 3; 14pp; English.
   /note= "amidated"
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70.0%;
                                                                                                 92US-00965675
                                                                                                                              90US-00626402
91US-00744977
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        7; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 EHWSYGLRPG
                                                                                                                                                                             (MATH/) MATHIAS JR.
                                                                                                                                                                                                                                              WPI; 1995-263259/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        correct PF field.)
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Modified-site
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                                                                                                                                14-DEC-1990;
14-AUG-1991;
                                                                                                 19-0CT-1992;
                                  US5434136-A
                                                              18-JUL-1995
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Matches

ò 셤 RESULT 33 ADC79469

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The present invention relates to cytotoxic receptor ligand scaffolds (CRLS) of the general formula (Lys)n(Unb)m(Sol)m-(Xn)n-Z, where Unb=sterically unbindered group, Sol=hydrophilc solubilising group, n= 3-10 in = 0-5; X= receptor ligand, and Z= cytotoxin. The CRLS are used to sterilise animals, they destroy cells in the pituitary that secrete gonaderrophins. The CRLS can also be used to halt the development of tumours (e.g. breast and prostatic cancers) stimulated by steroid hormones or to treat endometriosis. These scaffolds induce efficient targeting agent, X, is almost the same as that of free ligand, and the scaffolds provide a permanent sterilisation (in both sexes) without anabolic effects Sterilisation is achieved without losing the anabolic effects of testosterone. The present sequence represents naturally occurring gonadotrophin releasing hormone (GRRH).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New cytotoxin-receptor ligand conjugate based on poly:lysine scaffold used to kill selected pituitary cells for chemical sterilisation, also for treating cancers and endometriosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       88.0%; Score 44; DB 2; Length 10; 70.0%; Pred. No. 0.15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
10
/note= "C-terminal amide"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure, Page 17; 50pp; English.
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/note= "amidated"
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                                                                                                                                                                                                                                        94GB-00020249.
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The invention relates to the obtaining of a potent agonist or antagonist peptide by the replacement of selected amino acids with synthetic achiral
                                                                                                                                                           The invention relates to the obtaining of a potent agonist or antagonist peptide by the replacement of selected amino acids with synthetic achiral amino acids. The present sequence represents a luteinising hormone-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note= "N-benzylglycine, N-cyclohexylglycine or the ring substituted derivatives of these two amino acids"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 - useful as bradykinin
                                                                            New bradykinin analogues contg. N-benzyl-glycine - useful as bradykinin
agonists or antagonists, useful e.g. as analgesics.
                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bradykinin, N-benzylglycine, agonist, receptor study, antagonist, achiral, analgesic, luteinising hormone-releasing hormone; LHKH;
                                                                                                                                                                                                                                                                                                                    ó.
                                                                                                                                                                                                                                                                                   Length 10
                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Luteinising hormone-releasing hormone (LH-RH) analogue.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New bradykinin analogues contg. N-benzyl-glycine - agonists or antagonists, useful e.g. as analgesics.
                                                                                                                                                                                                                                                                                   Score 44; DB 2;
Pred. No. 0.15;
                                                                                                                                                                                                                                                                                                                        0; Mismatches
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                                                                                                                                 Disclosure, Col 11-12, 15pp, English.
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92US-00945664.
                                                                                                                                                                                                                                                                                     88.0%;
70.0%;
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                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 70.0
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CALIFORNIA
                                                                                                                                                                                                                     releasing hormone (LHRH)
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              Young JD, Mitchell AR;
                                                                                                                                                                                                                                                                                                                                                        1 EHWSXGXXPG 10
                                                                                                                                                                                                                                                                                                                                                                                         EHWSYGLRPG 10
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                                               WPI; 1996-299898/30.
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                                                                                                                                                                                                                                                      Sequence 10 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gonadoliberin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Modified-Bite
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-JUL-1989;
16-SEP-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (REGC ) UNIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US5527882-A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Young JD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAW65203;
                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAW65203
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                                                                                                                                                                                                                                                                                                       ARR77431 is catfish gonadotropin releasing hormone (cfGnRH). It is used in a binding assay as a muan GnRH-related peptides of the invention are capable of inhibiting the proliferation of liver cancer cells. The effect of GnRH-related peptides is not caused by derived cativity, since upon treatment with the peptides, hepatomachived cell lines HepG2 and HuH-7 did not lose cellular viability (>90%). The peptides appear to cause hepatoma cells to move into a continuous cytostatic state. The peptides can be used to suppress or inhibit the growth of liver cancer cells. Since liver cancer cells have receptors with high binding affinity for GnRH and its analogues the peptides can also be useful in the diagnosis of liver cancer
                                                                                                                                                                                                                       Treating mammalian liver cancer - by administering an inhibitory amt. of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bradykinin, N-benzylglycine, agonist, receptor study, antagonist; achiral, analgesic, luteinising hormone-releasing hormone; LHRH;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ..
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 44; DB 2;
Pred. No. 0.15;
); Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Luteinising hormone-releasing hormone (LH-RH).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         'note= "Pyroglutamic acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note= "C-terminal amide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
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                                                                                                                        (UYTE-) UNIV TECHNOLOGIES INT INC
                                                                                                                                                                                                                                                                            Example 1; Page 24; 53pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAW65201 standard; peptide; 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      88.0%;
70.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                94US-00335202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               89US-00376839.
                                                                                     94US-00242678
                                                   95WO-IB000323
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity 70.0
les 7; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 EHWSXGXXPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EHWSHGLNPG 10
                                                                                                                                                                                          WPI; 1996-010876/01.
                                                                                                                                                                                                                                             GnRH-related cpd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 10 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Key
Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        achiral, anal
gonadoliberín
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Modified-site
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                                                    05-MAY-1995;
                                                                                       13-MAY-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US5527882-A.
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                  23-NOV-1995
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAW65201;
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RESULT 35

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This sequence represents a luteinising hormone releasing hormone analogue. The invention relates to peptides having the following amino acid or LaZ-X3-S-X6-X7-P-X8- NH2, in which X1 = pyroglutamic acid or D-acetylnaphthylalanine; X2 = histidine or D-4-chlorophenylalanine; X3 = an amino acid derivative capable of chelating a leucine or arginine; X3 = an amino acid derivative capable of chelating a radiometal; X6 = leucine or tryptophan or tryptophan or lysine; and X8- NH2 = glycine amine or D-alanine amide. The peptides are luteinising hormone releasing hormone (LHRH) analogues that can bind radiomolides while retaining the ability to specifically bind to the LHRH receptor. They can be used for preparing radiolabelled peptides that specifically bind to cells or tissues that express LHRH receptors. The radiolabelled peptides can be used to image or treat tumours, infectious lesions, peptides can be used to image or treat tumours, infectious lesions. It issues. The radiometal chelating peptides are stable in blood and other body fluids and tissues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New luteinising hormone releasing hormone analogues - having an amino acid residue deriv. for chelating a radio:metal for use in diagnosis and
amino acids. The present sequence represents a luteinising hormone-releasing hormone (LHRH) analogue, containing an N-benzylglycine, N-cyclobaxylmethylglycine or a ring substituted derivative of one of these two amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                  J hormone releasing hormone; LHRH receptor; tumour; chelating peptide; diagnosis; therapy; analogue.
                                                                                                                         Length 10;
                                                                                                                                                       3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                   Luteinising hormone releasing hormone analogue #1.
                                                                                                                       Score 44; DB 2;
Pred. No. 0.15;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               'note= "Pyroglutamic acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note= "C-terminal amide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Griffiths GL;
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                                                                                                                                                                                                                                                                                                       AAW45642 standard; peptide; 10 AA.
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                                                                                                                         88.0%;
70.0%;
                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                             Ouery Match
Best Local Similarity 70...
7, Conservative
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                                                                                                                                                                                          1 EHWSXGXXPG 10
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F
                                                                                                                                                                                                                        EHWSYGLRPG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1997-077263/07.
                                                                                             Sequence 10 AA;
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Modified-site
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mcbride WJ,
                                                                                                                                                                                                                                                                                                                                                                      05-JUN-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                   Luteinising
radiometal c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19-DEC-1996.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic
                                                                                                                                                                                                                                                                                                                                     AAW45642;
                                                                                                                                                                                                                                                                        RESULT 37
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Novel LHRH antagonist peptides are disclosed in which the residue of the anino acid corresponding to position 6 of natural mammalian LHRH contains a hydrophilic Nacyl moiety, a dipolar moiety, a sulphonium moiety, a receptor-modifying moiety or a small polar moiety. The peptides may have reduced histamine-releasing activity and improved water solubility. They are useful for treatment of precocious puberty, prostate cancer, ovarian cancer, banign prostatic hypertrophy, endometricals, uterine fibroids, breast cancer, premenstrual syndrome, polycystic ovary syndrome and diseases which result from excesses of gonadal hormones in humans or animals. They may also be used for behaviour modification (including chemical castration), for treatment of immunosuppressed patients, or for inhibition of ovulation. The present sequence represents an additionally claimed new peptide which instead has a modification at position 8
                                                             ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New LHRH antagonist peptide(s) modified at amino acid position 6 - useful for treatment of, e.g. prostate cancer, breast cancer, endometriosis or premenstrual syndrome.
                                                               Gaps
                                                               ..
0
                                    2; Length 10;
                                                               3; Indels
                                                                                                                                                                                                                                                                                                       release; water solubility;
                                     Score 44; DB 2;
Pred. No. 0.15;
); Mismatches
                                                                                                                                                                                                                                                                                                       LHRH; antagonist; histamine release; w
luteinising hormone releasing hormone.
                                                                                                                                                                                                                                                                                                                                                                                                                                   note= "Lys(COCH2Br)"
                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                           AAW16294 standard; peptide; 10 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 31; Page 46; 53pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                        note= "pyroGlu"
                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note= "Gly-NH2"
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0
                                     88.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (INDV ) UNIV INDIANA FOUND.
                                                                                                                                                                                                                                                  (first entry)
                                                                  Conservative
                                                                                            1 EHWSXGXXPG 10
                                                                                                                     1 EHWSYGLRPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1997-077264/07.
                                                                                                                                                                                                                                                                              8-Lys (COCH2Br) -LHRH
                                                    Local Similarity
nes 7; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 10 AA;
          Sequence 10 AA;
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Modified-site
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-JUN-1996;
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                                                                                                                                                                                                                                                  07-OCT-1997
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                                                                                                                                                                                                                                                                                                                                                    Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Roeske RW
                                                                                                                                                                                                                         AAW16294;
                                        Query Match
                                                                                                                                                                  RESULT 38
                                                                  Matches
                                                                                                                                                                                   AAW16294
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                                                                                                                           Gaps
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Score 44; DB 2; Length 10; Pred. No. 0.15;

88.0%; 70.0%;

Query Match Best Local Similarity

(first entry)

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Lutenizing hormone/releasing hormone mass spectrometry analysis.
                                                                                                                       dass spectrometry; polymer analysis; biopolymer analysis.
                                      AAW04612 standard; peptide; 10 AA.
                                                                                                                                                                   WO9636986-A1
                                                                                13-AUG-1997
                                                                                                                                                Synthetic.
                                                            AAW04612;
                  RESULT 4(
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel LHRH antagonist peptides are disclosed in which the residue of the amino acid corresponding to position 6 of natural mammalian LHRH contains a hydrophilic N-acyl moiety, a dipolar moiety, a sulphonium moiety, a receptor-modifying moiety or a small polar moiety. The peptides may have reduced histamine-releasing activity and improved water solubility. They are useful for treatment of precocious puberty, prostate cancer, ovarian cancer, premenstrual spractorphy, endometriosis, uterine fibroids, breast cancer, premenstrual syndrome, polycystic ovary syndrome and diseases which result from excesses of gonadal hormones in humans or animals. They may also be used for behaviour modification (including chemical castration), for treatment of immunosuppressed patients, or for inhibition of ovulation. The present sequence represents an additionally claimed new peptide which instead has a modification at position 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New LHRH antagonist peptide(s) modified at amino acid position 6 - useful for treatment of, e.g. prostate cancer, breast cancer, endometriosis or premenstrual syndrome.
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 Gaps
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                                                                                                                                                                                                                                                                               S-methyl-methionine"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 44; DB 2; Length 10;
Pred. No. 0.15;
0; Mismatches 3; Indels
                                                                                                                                                                                antagonist, histamine release; water solubility; nising hormone releasing hormone.
 Mismatches
                                                                                                                                                                                                                                                                               note= "Met(S+Me), i.e.
                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                AAW16293 standard; peptide; 10 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 31; Page 46; 53pp; English.
                                                                                                                                                                                                                                                           'note= "pyroGlu"
                                                                                                                                                                                                                                                                                                     /note= "Gly-NH2"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   88.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                               (INDV ) UNIV INDIANA FOUND.
                                                                                                                                         (first entry)
  7; Conservative
                      EHWSXGXXPG 10
                                          EHWSYGLKPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1997-077264/07.
                                                                                                                                                              8-Met (S+Me) - LHRH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 10 AA;
                                                                                                                                                                                                                                        Key
Modified-site
                                                                                                                                                                                                                                                                      Modified-site
                                                                                                                                                                                                                                                                                            Modified-site
                                                                                                                                                                                                                                                                                                                           WO9640757-A2
                                                                                                                                                                                                                                                                                                                                                                    07-JUN-1996;
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                                                                                                                                         07-OCT-1997
                                                                                                                                                                                                                                                                                                                                               19-DEC-1996
                                                                                                                                                                                              luteinising
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                                                                                                                    AAW16293;
                                                                         LHRH;
   Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                        A method of obtaining sequence information about a polymer (e.g. DNA, RNA, peptide nucleic acids, proteins, peptides and carbohydrates) comprising monomers of known mass has been claimed. The present sequence represents a lutenizing/releasing hormone, and was used as an example as a digestion before analysis by mass spectrometry, using this novel onbe represented in a single digestion from a nine well digestion can be represented in a single digestion or it is often derived from two or more wells. The methods, apparatus and kit (claimed) can be used for the nalysis of polymers, particularly biopolymers, e.g. DNA, RNA, peptide nucleic acids, proteins, peptides and carbohydrates. It provides a rapid, automated and cost effective sequencing of polymers, with a statistical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GnHR; lytic peptide; rat; gonadotrophin-releasing hormone; contraception;
sterility; luteinising hormone; LH; l-LHRH-III; fertility; pituitary;
                                                                                                                                                                                                                                                                                    proteins, etc.
pref. using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                       Sequencing polymers, e.g. DNA, RNA, peptide nucleic acids, by obtaining mass to charge ratios of polymer fragments, mass spectrometer, and performing statistical analysis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 44; DB 2;
Pred. No. 0.15;
); Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ā
                                                                                                                                                       (PERS-) PERSEPTIVE BIOSYSTEMS INC.
                                                                                                                                                                                                                                                                                                                                                                                    Example 2; Page 32; 86pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAW76373 standard; peptide; 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               88.0%;
                                                                                     95US-00446055.
95US-00447175.
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Best Local Similarity 70..
7, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 EHWSXGXXPG 10
                                                                                                                                                                                                      Tarr GE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EHWSYGLRPG
                                                                                                                                                                                                                                                  WPI; 1997-012308/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rat GnHR peptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 10 AA;
                                                                                                                                                                                                   Patterson DH,
                                            17-MAY-1996;
                                                                                          19-MAY-1995;
                                                                                                           19-MAY-1995;
21-NOV-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAW76373;
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Gaps

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Conservative

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GnHR; lytic peptide; rat; gonadotrophin-releasing hormone; contraception; sterility; luteinising hormone; LH; l-LHRH-III; fertility; pituitary; imaprey-luteinising hormone-releasing hormone; gonadotropes; inhibitor; tumour; ligand; fusion protein; reproductive capacity; insect; treatment; growth rate; pest control; L-hecate; cancer; adenoma; lymphocyte;

(revised)
(first entry)

17-0CT-2003 04-DEC-1998

AAW76389;

Chicken I GnHR peptide

/note= "pyroglutamic acid"

Location/Qualifiers

Modified-site

WO9842365-A1

01-OCT-1998

autoimmune disease; chicken

Sallus gallus.

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This sequence represents the rat gonadotrophin-releasing hormone (GnRH), which is used in a method for producing long-term contraception or sterility by administering GnRH, beta luteinising bromone (LHM) or lamprey clusteinising hormone-releasing hormone (L-LERH-III) or temporarily restoring fertility in a mammal in which the pituitary gonadotropes have been selectively destroyed by administration of GnRH or l-LERH-III. This convent of hormone- or ligand-dependent tumours by administering the relevant hormone- or ligand-dependent tumours by administering the relevant hormone or ligand dependent on binding of a cell-surface receptor to a crivity of which is dependent on binding of a cell-surface receptor to a ligand by administering the ligand and lytic peptide, inhibiting reproductive capacity of an insect by administration of a lytic peptide. Fusion proteins combining such proteins and lytic peptides can be fused and may also include a carrier domain, specifically vitamin B12, that facilitates intestinal uptake after oral administration. These methods control e.g. plants containing an exogenous gene encoding L-hecate. A further application is in the treatment of ovarian, breast, prostate, control e.g. plants containing an exogenous gene encoding L-hecate. A further application is in the treatment of ovarian, breast, prostate, choweverial to resticular cancers, prolactinoma, growth hormone-, theorems. In addition the proteins can be used to kill lymphocytes invested.
lamprey-luteinising hormone-releasing hormone; gonadotropes; inhibitor; tumour; ligand; fusion protein; reproductive capacity; insect; treatment; growth rate; pest control; L-hecate; cancer; adenoma; lymphocyte;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New fusion of hormone and lytic peptide for selective cell killing -
particularly for controlling fertility in animals, insect pests, fish
etc., also for treatment of hormone-dependent cancer, vixal infections
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Yu WH;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              . Hansel W, Koonce KL, Mccann SM, Blzer PH;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (LOUU ) UNIV LOUISIANA STATE & AGRIC & MECH COLL.
                                                                                                                                                                                                                                                                                                                                                                         /note= "pyroglutamic acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 1-6; Page 37; 59pp; English.
                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   97US-0041009P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98WO-US006114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97US-00869153.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                and auto-immune diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Jaynes JM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Foil LD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1998-531711/45.
                                                                                                                              autoimmune disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 10 AA;
                                                                                                                                                                                                                                                                                                                             Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO9842365-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27-MAR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-0CT-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Enright FM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Melrose PA,
                                                                                                                                                                                                            Rattus sp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             infected
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New fusion of hormone and lytic peptide for selective cell killing -particularly for controlling fertility in animals, insect pests, fish etc., also for treatment of hormone-dependent cancer, viral infections

Example 9-14; Page 42; 59pp; English.

etc., also ion creatment and auto-immune diseases.

Z.

Mccann SM,

JM, Hansel W, Koonce KL, J, Elzer PH;

Jaynes JM Foil LD,

FM, PA,

Shright Melrose WPI; 1998-531711/45.

(LOUU) UNIV LOUISIANA STATE & AGRIC & MECH COLL.

98WO-US006114. 97US-0041009P 97US-00869153. 97US-0057456P.

27-MAR-1998;

03-SEP-1997; 27-MAR-1997;

04-JUN-1997

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This sequence represents a chicken gonadotrophin-releasing hormone or setzilty by administering GnRH, beta luteinising long-term contraception or starility by administering GnRH, beta luteinising hormone (IH) or temporarily restoring fertility in a mammal in which the pituitary gonadotropes have been selectively destroyed by administration of GnRH-III) or temporarily restoring fertility in a mammal in which the pituitary gonadotropes have been selectively destroyed by administration of GnRH-III. This capacity of hormone or ligand plus a lytic peptide, for killing a cell the activity of which is dependent on binding of a cell-surface receptor to a ligand plus a lytic peptide, inhibiting reproductive capacity of an insect by administration of a lytic peptide. Fusion proteins combining such proteins and lytic peptides can be fused and may also incelude a carrier domain, specifically vitamin B12, that and may also incelude a carrier domain, specifically vitamin B12, that can intestinal uptake after oral administration. These methods have applications for increasing the growth rate of mammals, for pest control e.g. plants containing an exogenous gene encoding L-hecate. A thyrotropin- or gonadotropin-dependent adenomas, or any pituitary adenome. In addition the proteins can be used to kill lymphocytes infected cells. (Updated on 17-OCT-2003 to standardise OS field)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 44; DB 2; Length 10;
Pred. No. 0.15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       88.0%;
70.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 70.v
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 EHWSXGXXPG
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DB 2; Length 10;
                       Score 44; DB 2
Pred. No. 0.15;
                       88.0%;
                       Query Match
Best Local Similarity
Sequence 10 AA;
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AAW76389 standard; peptide; 10 AA

RESULT 42 AAW76389

1 EHWSYGLRPG 10

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LHRH; luteinising hormone releasing hormone; neopentylglycine; Npg; reproductive endocrinology; sex hormone-dependent tumour; contraception; infertility; prostate cancer; autoimmune disease.
                                                                                                                                       odlu-His-Trp-Ser-Tyr-Gly-Npg-Arg-Pro-Gly-NH2, an LHRH analogue.
                                                                                                                                                                                                                                                                                               'note= "neopentylglycine, Npg
                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                             10
/note= "Gly-NH2"
                                                               AAW47842 standard; peptide; 10
                                                                                                                                                                                                                                                                                                                                                                                                    97EP-00401212.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New LH-RH peptide analogues
treatment of infertility or
                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Delansorne R, Paris J;
                                                                                                                                                                                                                                                                       /note=
1 EHWSYGLRPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                     (SOTH ) THERAMEX LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1999-011613/02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         immune diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 10 AA;
                                                                                                                                                                                                                                              Key
Modified-site
                                                                                                                                                                                                                                                                                   Modified-site
                                                                                                                                                                                                                                                                                                            Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                    02-JUN-1997;
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                                                                                                                16-MAR-1999
                                                                                                                                                                                                                                                                                                                                                 EP882736-A1.
                                                                                                                                                                                                                                                                                                                                                                           39-DEC-1998.
                                                                                                                                                                                                                    Synthetic
                                                                                       AAW47842;
                                     RESULT 44
                                                    AAW47842
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present sequence represents a mammalian inteinising hormone releasing hormone (mLHRH). A LHRH isolated from Lamprey III (1-LHRH-III) is defentical with, or very similar to, the mammalian follicle-stimulating hormone (FSH)-releasing factor, i.e. present sequence. 1-LHRH-III causes a selective change in serum FSH levels but not a proportional change in serum levels of LH (luteinising hormone). The peptide and its agonists (see AMM95/69-95) can be used to increase the level of FSH in vertebrates, and so are used to increase fertility, in males or females, particularly in humans but also in other mammals and fish. Antagonists of the peptide (see AAM96796-104) can be used to decrease the release of FSH, and so are used to decrease the release of FSH, and so are used to decrease fertility by inhibiting spermatogenesis and follicular/ovarian development
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                                                                                                                                                                                                                 Lamprey III luteinising hormone releasing hormone; 1-LHRH-III; mammalian FSH-releasing factor; serum FSH level; LH; luteinising hormone; angonist; follicle-stimulating hormone; FSH; vertebrate; fertility; antagonist; spermatogenesis inhibition; follicular development; ovarian development.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Selectively altering levels of follicle stimulating hormone in vertebrates - using lamprey luteinising hormone releasing-hormone and its derivatives, for increasing or reducing fertility.
 Gape
                                                                                                                                                                                                                                                                                                                                                                                      /note= "C-terminal amide attached to this residue"
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0
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 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (LOUU ) UNIV LOUISIANA STATE & AGRIC & MECH COLL.
                                                                                                                                                                                           Luteinising hormone releasing hormone (m-LHRH-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 44; DB 2;
Pred. No. 0.15;
0; Mismatches
Mismatches
                                                                                                                                                                                                                                                                                                                                                              /note= "pyroglutamic acid"
                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                AAW96765 standard; peptide; 10 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Page 5; 40pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98WO-US011512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97US-00869153
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                                                                                                                                                                 (first entry)
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Best Local Similarity 70.0
Matches 7; Conservative
7; Conservative
                          10
                                                 5
                          1 EHWSXGXXPG
                                               1 EHWSYGLOPG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1999-070238/06.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Yu WH;
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                                                                                                                                                                                                                                                                                                                                    Key
Modified-site
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                                                                                                                                                                                                                                                                                                                                                                                                                                          10-DEC-1998
                                                                                                                                                                                                                                                                                              Synthetic.
Mammalia.
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                                                                                                                                         AAW96765
Matches
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                                                The patent discloses new luteinising hormone releasing hormone (LH-RH) peptide analogues in which neopantylglycine (Npg) is substituted for Leu at position 7. A generic formula is given. The present sequence is a specific example of the new analogues. Replacement of Leu(7) in LH-RH by Npg increases the activity of LH-RH itself, and makes it possible to obtain analogues with a high affinity for the LH-RH receptor. The analogues are non-toxic at therapeutically effective doses. They we used in reproductive endocrinology and in treatment of sex hormone-dependent benign or malignant tumours. E.g. they may be used for contraception or for the treatment of infertility and prostate cancer. They may also be used for treatment of autoimmune diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  88.0%; Score 44; DB 2;
80.0%; Pred. No. 0.15;
Live 0; Mismatches
Example 1; Page 12; 25pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAY03856 standard; peptide; 10 AA.
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Best Local Similarity 80.0
Matches 8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 EHWSXGXXPG 10
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AAY03856
ID AAY03
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- are useful, e.g., in contraception, in in treatment of prostate cancer or auto-

SA.

EHWSXGXXPG 10

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Gaps

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3; Indels

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RESULT 47
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                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to method for producing long-term contraception or sterility in a mammal that comprises administering an amphipathic lytic peptide compound. The comprise: (a) a hormone domain selected from gonadocropin-releasing hormone (GRRH) and GRRH analogues, and (b) a lytic peptide domain. The compounds are relatively small and are not antigenic. Lysis of gonadocropes has been observed to be very rapid. The components - the ligand and be lytic peptide-may optionally be administered as a fusion peptide. The methods can be applied to dogs, cars, cows, bulls, pigs, horses, sheep or humans, including sexually imparate.
                                                                      Contraception; sterilitý; amphipathic; lytic peptide; hormone domain; gonadotropin-releaaing hormone; GnRH; analogue; gonadotrope; dog; cat; cow; bull; pig; horse; sheep.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                       Production of long-term contraception or sterility in, e.g. cats - ladministering a compound comprising fusion peptide of gonadotropin-releasing hormone and lytic peptide domains.
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                                                                                                                                                                                                                                                                                               Enright F, Jaynes JM, Hansel W, Elzer PH, Melrose PA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3; Indels
                                                                                                                                                                                                                                                                         (LOUU ) UNIV LOUISIANA STATE & AGRIC & MECH COLL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 44; DB 2;
Pred. No. 0.15;
); Mismatches
                                                                                                                                                                /note= "pyroglutamic acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ubiquitin fusion protein GnRH monomer.
                                                   Amino acid sequence of GnRH peptide.
                                                                                                                                                                                                                                                                                                                                                                                   Example 1-6; Page 22; 34pp; English.
                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAY31176 standard; peptide; 10 AA.
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70.0%;
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                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 EHWSXGXXPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EHWSYGLRPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           immature individuals
                                                                                                                                                                                                                                                                                                                    WPI; 1999-204980/17.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 10 AA;
                                                                                                                                                   Modified-site
                                                                                                                                                                                     WO9911282-A1
                                                                                                                                                                                                                               01-SEP-1998;
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                              16-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     28-OCT-1999
                                                                                                                                                                                                          11-MAR-1999
                                                                                                                      Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAY31176;
           AAY03856;
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ID AAY3
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AC AAX3
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DT 28-C
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XX
UDIC
KW UDIC
KW IMMI
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This invention describes a novel fusion protein, comprising a heat shock protein (e.g. ubiquitin), fused to an epitope (s) in a defined manner which is useful for the simulation of a highly specific immune response when administered to an animal. The protein of the invention may be post translationally modified (e.g. by the addition of fatty acids to enhance immunogenicity). The fusion proteins of the invention can be used as confirmed of control of viral infections, beacterial infections, parasitic infection and cancer. The fusion proteins can be used in pharmaceutical compositions for the treatment of gastrointestinal diseases, pulmonary inflections, respiratory inflections, and HIV diseases, pulmonary inflections, respiratory inflections, and HIV diseases, pulmonary inflections, respiratory inflections, and HIV diseases in parasitic infection of anti-self immune responses. e.g. infections of anti-gonadotropin releasing hormone and follicle simulating to presentation of anti-gonadotropin releasing hormone and follicle simulating in the suppression of ulternizing hormone and follicle simulating to the treatment of prosted cancer and breast cancer. In livestock, the normone with indirectly suppresses stridogenesis and gamete maturation in the treatment of prosted cancer and breast cancer. In livestock, the ability to stimulate an anti-self response provides a simple alternative complysical castration. Immunocastration of pigs is a better alternative to physical castration. Immunocastration of pigs is a better alternative complysical castration. Immunocastration of pigs is a better alternative series as of effects associated with physical castration, as it does not result in any of the detrimental side effects associated with physical castration, and speam proteins for fertility control of allergic reactions, control. A further use of the fusion proteins is as part of a vaccine control. A further use of the fusion proteins as part of a vaccine can be used to detect and identify antibodies from experimental and d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
steridogenesis, gamete maturation, prostate, breast, castration, TNF; tumour necrosis factor; septic shock; arthritis; Crohi's disease, inflammatory bowel disease; ulcerative colitis; chorionic gonadetropin; fertility; sperm protein; growth rate; antibody; detection; GnRH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Spitope-containing fusion proteins used to generate a highly specific
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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Pred. No. 0.15;
0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 3; Page 41; 67pp; English.
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Best Local Similarity 70.0-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 EHWSXGXXPG 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (IGEN-) IGEN INT INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                immune responses.
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                                                                                                                                                                                                                                                                                                                                                                                                                                          26-JAN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19-FEB-1998;
                                                                                                                                                                                                                                                                               W09942472-A1
                                                                                                                                                                                                                                                                                                                                                               26-AUG-1999,
                                                                                                                                                                                                        Synthetic.
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(first entry)

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Cell activation; pancreas; treatment; cardiovascular disease; trauma; inflammatory disease; autoimmune diseases; arthritis; diabetes; stroke; organ rejection; ischemia; Alzheimer's disease; myocardial infarction; haemorrhagic shock; diabetic retinopathy; venous insufficiency; angina; trauma; protease inhibitor; hypertension; sepsis.
                                             Neutrophil-activating pancreatic derived peptide 29.
                                                                                                                                                                                                                 Stoughton RB, Schmid-Schonbein GW,
AAY50229 standard; peptide; 10 AA.
                                                                                                                                                                                    CELL ACTIVATION INC UNIV CALIFORNIA.
                                                                                                                                                                                   (CELL-) CELL ACTIVATION I
(REGC ) UNIV CALIFORNIA.
(SCRI ) SCRIPPS RES INST.
                                                                                                                        WO9946367-A2.
                                                                                                                                                     11-MAR-1999;
                                                                                                                                                                     11-MAR-1998;
                              12-JAN-2000
                                                                                                                                                                                                                                                                        or ischemia.
                                                                                                                                       16-SEP-1999
               AAY50229
                                                                                                          Mus sp.
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99WO-US005247. 98US-00038894.

This invention describes a novel method for the use and preparation of cell activating compositions which involves preparing a cell activating compositions which involves preparing a cell activating composition (a) homogenizing pancreatic tissue in buffer at composition comprising (a) homogenate, (b) removing composition comprising (a) homogenate, (c) optionally incubating the resulting the bomogenate and selecting fractions that exhibit cell activation activity. The methods can be used for improving treatment of activation activity. The methods can be used for improving treatment controme or reducing risk of treatment of e.g. cardiovascular disease, inflammatory disease, trauma, autoimmune disease, arthritis, organ crejection, diabetes and diabetic complications, stroke, ischemia.

Alzheimer's disease, myocardial infarction, haemorrhagic shock, diabetic complications, stroke, ischemia.

They can be used in the vectorinary treatment of a non-human subject. Protease inhibitors can be used to lower cell activation resulting from they can be used in the vectorinary treatment of a non-human subject. Protease inhibitors can be used to lower cell activation of an elevated level of hydrogen peroxide dismutase (SOD) indicates leukroyre up regulation, An elevated level of the onset of an acute cardiovascular disorders; such a disease onset or ischemic complications. An elevated level of hydrogen peroxide in plasma or whole blood and in the presence of sop peroxide in plasma or whole blood and a low level in the presence of SOD is indicative of a chronic or inminion computed in the presence of SOD is indicated level of hydrogen peroxide in the presence of SOD is indicated level of hydrogen peroxide in plasma or whole blood and in he pervent of the onset of an acute cardiovascular disorders; such is indicative of a chronic or incurred level or i Use of cell activating compositions in developing products for diagnosis and treatment of e.g. cardiovascular, inflammatory, autoimmune or Alzheimer's disease, trauma, arthritis, organ rejection, diabetes, stroke f a chronic or immune compromised condition e.g. sepsis. AAY50201-Y50334 represent peptides used in the Example 9; Page 182; 184pp; English. WPI; 1999-580234/49 indicative

Sequence 10 AA;

ö Gaps .. 0 88.0%; Score 44; DB 2; Length 10; 70.0%; Pred. No. 0.15; ive 0; Mismatches 3; Indels Query Match
Best Local Similarity 70..
Ar Conservative

1 EHWSYGLRPG 10

AAW94890

Ą AAW94890 standard; peptide; 10

AAW94890;

(first entry) 11-MAY-1999

LHRH peptide fragment.

LHRH; immune response; luteinising hormone releasing hormone; DT; diphtheria toxoid; castrating; cestrus cycling; aggression; breast; sexual activity; organoleptic; livestock; cell growth; malignant; prostate; ovarian; oncofoetal; hyperplastic; pregnancy; endometriosis; inflammatory response.

Homo sapiens.

WO9902180-A1

21-JAN-1999

09-JUL-1998;

97AU-00007768. (CSIC-) CSI LID 09-JUL-1997;

Hugli TE, Kistler E;

Mcnamara MK;

WPI; 1999-120511/10.

New immunogenic leutenising hormone releasing hormone compositions - comprise LHRH conjugated to diphtheria toxoid and adsorbed to an ionic polysaccharide, used to inhibit reproductive function in animals.

Example; Page 30; 41pp; English.

The invention relates immunogenic composition for eliciting an immune response to luteinising hormone releasing hormone (LHRH). The composition comprises a LiRH-diphteria toxoid (DT) conjugate adsorbed to an ionic comprises a LiRH-diphteria toxoid (DT) conjugate adsorbed to an ionic polysaccharide. The LHRH-DT compositions can be used for eliciting an immune response to LHRH, for castrating an animal, for regulating osstrus cycling in a female animal or for inhibiting characteristics induced by the sexual maturation of an animal, e.g. aggression or sexual activity. They can also be used for achieving production gains in livestock, e.g. reduction or elimination of unwanted organoleptic characteristics from the meat of livestock. They can also be used for inhibiting the growth of cells which are regulated directly or indirectly by LHRH, e.g. malignant concorderal cells or hyperplastic cells. They can also be used for inhibiting pregnancy, prostate cells, malignant ovarian cells, an animal. They can also be used for inhibiting pregnancy, prostate cells, and animal. They can also be used for confinent in pregnancy, prostate enlargement, endometriosis or inflammatory responses. The LHRH compositions induce a more effective immune response against LHRH compositions induce a more effective immune response against LHRH results in prevention of the release of the chormones LH and FSH from the anterior pituitary. Sequences AAW94890-93

Sequence 10 AA;

Gaps ö Score 44; DB 2; Length 10; Pred. No. 0.15; 0; Mismatches 3; Indels 88.0%; Query Match
Best Local Similarity 70...
T; Conservative

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EHWSXGXXPG 10 EHWSYGLRPG 10 Н

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EHWSXGXXPG 10

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Non-crosslinked protein particles for therapeutic and diagnostic use.
                                                                                                                                   Non-crosslinked protein particle, diagnostic, therapy, monodisperse, albumin, haemoglobin, nanometer, micrometer, clearance.
                                                                                                     Non-crosslinked protein particle peptide 116
AAY31067 standard; peptide; 10 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (HEMO-) HEMOSPHERE INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1999-508153/42.
                                                                                                                                                                                                                                 Key
Modified-site
                                                                                                                                                                                                                                                                                   Modified-site
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13-OCT-1992;
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                                                                    21-OCT-1999
                                                                                                                                                                                                                                                                                                                                                                           31-AUG-1999
                                                                                                                                                                                             Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Yen RCK;
The present invention describes tetrahydroisoquinoline derivatives (1). (1) have endocrine, cytostatic, depilatory, gastrointestinal, analgesic and gynaecological activities, and they act as luteinising hormone releasing hormone (LHRH) antagonists. (1) are useful for the treatment of sex hormone related conditions including precocious puberty, benign prostatic hyperplasia, breast and ovarian tumours, prostate tumours, cryptorchidism, hirsuitism in women, gastric motility disorders, dysmenorthoea and andometriosis. The present sequence represents an LHRH peptide purified from porcine and human hypothalamus tissue, which is used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New heterocyclic derivatives are luteinizing hormone releasing hormone antagonists, useful for the trearment of e.g. prostate cancer, endometriosis, precocious puberty, female hirsutism, gastric motility disorders and dysmenorrhea.
                                                                                                                                                                      Luteinising hormone releasing hormone, LHRH; human; porcine; hypothalamus; tetrahydroiscquinoline; LHRH antagonist; endocrine; cytostatic; depilatory; gastrointestinal; gynaecological; analgesic; sex hormone related condition; precocious puberty; breast cancer; benign prostatic hyperplasia; ovarian tumour; prostatic typerplasia; ovarian tumour; prostatic typerplasia; gastric motility disorder; dysmenorrhoea;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Swenson RE, Bruncko M;
Greer J;
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Pred. No. 0.15;
0; Mismatches 3; Indels
                                                                                                                                         Luteinising hormone releasing hormone peptide sequence.
                                                                                                                                                                                                                                                                                                                                                                                                               /note= "pyroglutamic acid"
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Demattei J,
                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure, Page 1, 128pp, English.
                                AAB03590 standard; peptide; 10 AA.
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Best Local Similarity 70.0%;
Matches 7; Conservative
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                                                                                                                                                                                                                                                                                                                         sapiens
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                                                                    AAB03590;
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RESULT 49
                     4AB03590
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91US-00641720. 92US-00959560. 93US-00069831. 94US-00212546.

96US-00747137

'note= "pyroglutamic acid" 10 /note= "C-terminal amide"

Location/Qualifiers

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This invention describes a novel aqueous suspension of monodisperse particles on non-crosslinked, non-denatured albumin (50-5000 nm) which is stable against dissolving upon dilution with an alcohol-free aqueous medium. The method involves (a) forming an aqueous solution containing albumin and hemoglobin and (b) treating the aqueous solution with an alcohol to cause the solution to become turbid. The particles are useful as agents for in vivo administration, either of their own administration or as a vehicle for other therapeutic or diagnostic agents. The method permits the formation of albumin and hemoglobin particles in the method nanometer and micrometer size range, in a form closer to their natural form than the forms of the prior art. The particles therefore constitute amove closely controlled agent for in vivo administration, with greater asse of clearance from the body after their pariod of usefulness.

ANY30952-Y31135 represent peptides used in the method of the invention
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88.0%; Score 44; DB
Best Local Similarity 70.0%; Pred. No. 0.15
Matches 7; Conservative 0; Mismatches
Example 22; Col 99-100; 65pp; English.
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2, 2004, 19:25:43

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> 1 EHWSXGXXPG 10 EHWSYGLRPG 10

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RESULT 50 AAY31067

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468 28 56.0 417 2 470 28 56.0 418 2 471 2 8 56.0 418 2 471 2 8 56.0 418 2 471 2 8 56.0 418 2 472 2 8 56.0 438 2 474 2 8 56.0 438 2 474 2 8 56.0 442 2 477 2 8 56.0 442 2 477 2 8 56.0 442 2 477 2 8 56.0 442 2 477 2 8 56.0 442 2 477 2 8 56.0 442 2 477 2 8 56.0 449 2 6 477 2 8 56.0 449 2 6 477 2 8 56.0 449 2 6 477 2 8 56.0 449 2 6 477 2 8 56.0 449 2 6 477 2 8 56.0 449 2 6 477 2 8 56.0 449 2 6 477 2 8 56.0 449 2 6 477 2 8 56.0 449 2 6 477 2 8 56.0 449 2 6 477 2 8 56.0 449 2 6 477 2 8 56.0 449 2 6 477 2 8 56.0 449 2 6 477 2 8 56.0 449 2 6 477 2 8 56.0 449 2 6 477 2 8 56.0 449 2 6 477 2 8 56.0 449 2 6 477 2 8 56.0 449 2 6 477 2 8 56.0 460 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 477 2 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	######################################	7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379 7379	ALIGN  J hormon  see meda  ision 17  Y.; Sue  f, 298-3  opin-rel  roles a	SCO Pre
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Gonddoliberin precursor - rhesus macaque (fragment)
N.Alternate names: luteinizing hormone releasing hormone
C,Species: Macaca mulatta (rhesus macaque)
C,Species: Macaca mulatta (rhesus macaque)
C,Date: O.2-Aug-1996 #sequence_revision 02-Aug-1996 #text_change 16-Jul-1999
C,Accession: 178541
R;Ma, Y.J.; Costa, M.E.; Ojeda, S.R.
Neuroendocrinology 60, 346-359, 1994
A,Title: Developmental expression of the genes encoding transforming growth factor alpha A,Reference number: 158134; MUID:95124501; PMID:7545971
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NiAlternate names: gonadotropin_releasing hormone I
C;Species: Allgator missispieneis (American alligator)
C;Species: Allgator missispieneis (American alligator)
C;Datesian: A60066
R;Lovejoy, D.A.; Fischer, W.H.; Parker, D.B.; MCRORY, J.E.; Park, M.; Lance, V.; Swanson Regul. Pept. 33, 105-116, 1991
A;Title: Primary structure of two forms of gonadotropin-releasing hormone from brains of A;Reference number: A60066; MUID:91352338; PMID:1882082
      A, Residues: 1-10 <BUR>
A, Residues: 1-10 <BUR>
A, Note: the natural and synthetic hormones have the same biological activity
A, Note: This hypothalanic hormone stimulates the secretion of both luteinizing and
C; Superfamily: gonadoliberin
C; Superfamily: gonadoliberin
C; Keywords: amidated carboxyl end; hormone; hypothalamus; pyroglutamic acid
F; 11 Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
F; 10/Modified site: amidated carboxyl end (Gly) #status experimental
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C;Superfamily: gonadoliberin
C;Rywords: amidated carboxyl end; hormone; hypothalamus; pyroglutamic
C;Rywords: amidated carboxylic acid (Gln) #status experiment
F;10/Modified site: amidated carboxyl end (Gly) #status experimental
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Pred. No. 0.072;
1; Mismatches 3; Indels
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60.0%; Pred. No. 0.072;
tive 1; Mismatches 3; Indels
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A;Molecule type: mRNA
A;Residues: 1-67 <RES>
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60.0%; Pred. No. 0.52;
tive 1; Mismatches
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Best Local Similarity 60.0
Matches 6; Conservative
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Best Local Similarity 60.0
Matches 6; Conservative
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es 6; Conserv
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C;Species: Sus scrofa domestica (domestic pig)
C;Date: 13-Jul-1981 #sequence_revision 13-Jul-1981 #text_change 18-Mar-1997
C;Accession: A01411
R;Baba, Y.; Matsuo, H.; Schally, A.V.
Biochem: Biophys. Res. Commun. 44, 459-463, 1971
A;Title: Structure of the porcine LH- and FSH-releasing hormone. II. Confirmation of the A;Reference number: A90172; MUID:72114303; PMID:4946067
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A, Residues: 1-10 EABA
A, Residues: 1-10, EABA
A, Residues: 1-10, EABA
A, Residues: 1-10, EABA
A, Rateleasto, H.; Arimura, A.; Nair, R.M.G.; Schally, A.V.
Biochem. Biophys. Res. Commun. 45, 822-827, 1971
A, Title: Synthesis of the porcine LH- and FSH-releasing hormone by the solid-phase methor A, Reference number: A90176; MUID: 72065376; PMID: 4942766
A, Contents: annotation; synthesis
A, Note: the synthetic and natural hormones have the same physicochemical and biological R; Baba, Y, X, Arimura, A.; Schally, A.V.
Biochem. Biophys. Res. Commun. 45, 483-487, 1971
A, Title: On the tryptophan residue in porcine LH and FSH-releasing hormone.
A; Reference number: A90175; MUID: 72117544; PMID: 4946275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A)Contents: annotation
A;Note: Trp-3 appears to be essential for biological activity
C;Comment: This hypothalamic hormone stimulates the secretion of both luteinizing and for Superfamily: gonadoliberin
C;Superfamily: gonadoliberin
C;Keywords: amidated carboxyl end; hormone; hypothalamus; pyroglutamic acid
F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
F;10/Modified site: amidated carboxyl end (Gly) #status experimental
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Proc. Natl. Acad. Sci. U.S. A. 69, 278–282, 1972
A.Title: Primary structure of the ovine hypothalamic luteinizing hormone-releasing facto
A.Reference number: A93780; MUID:72094314; PMID:4550508
C;Accession: I50739
R;White, S.A.; Kasten, T.L.; Bond, C.T.; Adelman, J.P.; Fernald, R.D.
Proc. Natl. Acad. Sci. U.S.A. 92, 8363-8367, 1995
A;Title: Three gonadctropin-releasing hormone genes in one organism suggest novel roles A;Reference number: I50739; MUID:95396797; PMID:7667296
A;Accession: I50739
A;Accession: I50739
A;Accession: I50739
A;Molecule type: mRNA
A;Molecule type: mRNA
A;Residues: 1-98 cMH1.
A;Cross-references: EMML:U31865; NID:g905398; PIDN:AAC59691.1; PID:g905399
C;Superfamily: gonadoliberin
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C;Species: Ovis orientalis aries, Ovis ammon aries (domestic sheep)
C;Date: 31-Dec-1991 #sequence_revision 31-Dec-1991 #text_change 18-Mar-1997
C;Accession: A93780; A01411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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Pred. No. 0.072;
1; Mismatches 3; Indels
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Pred. No. 0.5;
1; Mismatches
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Best Local Similarity 60.0
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                            6; Conservative
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A,Molecule type: protein
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NALternate names: gonadoliberin-releasing hormone (GnRH); luteinizing hormone releasing gonadoliberin precure sor.

Ny Alternate names: gonadoliberin-sessociated protein (GAP)

Ny Contains: gonadoliberin; gonadoliberin-associated protein (GAP)

C, Date: 31-Dec-1993 #sequence_revision 18-Mar-1997 #text_change 18-Jun-1999

R, Mason, A.J.; Hayflick, J.S.; Zoeller, R.T.; Young III, W.S.; Phillips, H.S.; Nikolics, Science 234, 1366-1371, 1986

A, Reference number: A47578

A, Reference number: A47578

A, Residues: 1-90 «MAS.

B, Residues
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Cross-references: GB:M12578; NID:g183418; PIDN:AAA35916.1; PID:g386749
A;Experimental source: hypothalamus
A;Eseburg, P.H.; Adelman, J.P.
Nature 311, 666-668, 1984
A;Title: Characterization of cDNA for precursor of human luteinizing hormone releasing ha; A;Reference number: A93342; MUID:85012739; PMID:6090951
A;Accession: A93342
A;Accession: A93342
A;Residues: 1-15,'S',17-92 <SEE>
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Pred. No. 0.7;
1; Mismatches 3; Indels
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Best Local Similarity 60.0
Best Local 6; Conservative
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                                                                                                                                                                                                                      qonadoliberin precursor
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A; Molecule type: mRNA
A; Residues: 1-92 <ADE>
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RHHUG
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HHIDIS

Gundoliberin I precursor - sharptooth catfish

Nylternate names: gonadoliberin, catfish-type; gonadotropin-releasing hormone I (GnRH-I
NyAlternate names: gonadoliberin, catfish-type; gonadotropin-releasing hormone I (GnRH-I
N)Contains: gonadoliberin I gonadoliberin Lassociated protein form I; gonadoliberin I-
C,Species: Clarias gariapians (sharptooth catfish)
C,Species: Clarias gariapians (sharptooth catfish)
C,Species: Clarias gariapians (sharptooth catfish)
C,Species: Clarias gariapians
C,Aderson, E.; Goos, H.
Eur. J. Sandbergen, T.; Anderson, E.; Goos, H.
Eur. J. Biochem. 222, 541-554, 1989
A,Fitle: Isolation, Characterization and expression of CDNAs encoding the catfish-type a
A,Racesion: S45602
A,Accession: S45602
A,Accession: S45602
A,Accession: S45601
A,Mocres reference = MBLX78049; NID:94291651; PRID:8020492
A,Cross references: EMBLX78049; NID:94291651; PRID:CAA54971.1; PID:9459434
A,Racesion: S45601
A,Accession: S45601
A,Accession: S45601
A,Accession: S45601
A,Rasidues: 1-46, 'S, '48-59, 'G', 61-80 <a href="https://docs.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.nic.nlm.n
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151423
gonadoliberin precursor - African clawed frog
gonadoliberin precursor - African clawed frog
NyAlternate names: luteinizing hormone releasing hormone
C;Species: Xenopus laevis (African clawed frog)
C;Date: 13-69-1996 #sequence_revision 13-Sep-1996 #text_change 16-Jul-1999
C;Accession: 151423
R;Hayes, W.P.; Wray, S.; Battey, J.F.
Endocrinology 134, 1835-1845, 1994
A;Title: The Frog GRRH-I gene has a mammalian-like expression pattern and conserved doma
A;Reference number: 151423
A;Reference number: 151423
A;Accession: 151423
A;Accession: 151423
A;Cattus: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-89 - HAY>
A;Cress-references: GB:L28040; NID:9496291; PIDN:AAA49728.1; PID:9496292
C;Genetics:
A;Gene: GRRH-I
C;Superfamily: gonadoliberin
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Pred. No. 0.69;
1; Mismatches
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Best Local Similarity 60.v
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Best Local Similarity 60.0
Matches 6; Conservative
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Ajuntrons: 47/3; 79/3
Ajuntrons: 47/3; 79/3
Cjenaciton:
Ajuntrons: 47/3; 79/3
Cjenaciton:
Ajuntrons: 47/3; 79/3
Cjenaciton:
Ajubscription: stimulates pituitary secretion of lutropin and follitropin
Ajubscription: stimulates pituitary secretion of lutropin and follitropin
Cjenacitor: stimulated carboxyl and the product of keywords: amidated carboxyl and homene; hypothalamus; placenta; pyroglutamic acid; r
Fi24-92/Product: spragonadoliberin #status predicted <PGN>
Fi24-32/Product: groadoliberin #status predicted <PGN>
Fi34-32/Product: groadoliberin #status predicted <CMN>
Fi37-92/Product: prolactin release-inhibiting factor #status predicted <PIF>
Fi34-32/Modified site: pyrolidone carboxyl acid (GIN) (in mature form) #status predicted F;33/Modified site: amidated carboxyl end (GIY) (amide in mature form following gly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gonadoliberin II - American alligator
NyAlternate names: gonadotropin-releasing hormone II
NyAlternate names: gonadotropin-releasing hormone II
C;Species: Alligator mississippiensis (American alligator)
C;Date: 31-Mar-1993 #sequence_revision 31-Mar-1993 #text_change 18-Mar-1997
C;Accession: B6006
C;Accession: B60066
R;Covejoy, D.A.; Fischer, W.H.; Parker, D.B.; McRory, J.E.; Park, M.; Lance, V.; Swanson Regul. Pept. 33, 105-116, 1991
A;Title: Primary structure of two forms of gonadotropin-releasing hormone from brains of A;Reference number: A60066; MUID:91352338; PMID:1882082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NyAlternate names: gonadotropin-releasing hormone I

NyAlternate names: gonadotropin-releasing hormone I

Cispecies: Gallus gallus (chicken)

Cibate: 21-Feb-1997 #sequence_revision 21-Feb-1997 #text_change 16-Jul-1999

Nol: Endocrinol: 11, 19-29, 1993

A; Title: Characterization of the chicken preprogonadotrophin-releasing hormone-I gene.

A; Reference number: 150644; MUID:94059355; PMID:7902095
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A;Residues: 1-10 <LOV>
C;Superfamily: gonadoliberin
C;Keywords: amidated carboxyl end; hormone; hypothalamus; pyroglutamic acid
C;Keywords: pyrrolidone carboxylic acid (Gln) #status experimental
F;1/Modified site: pyrrolidone carboxyl end (Gly) #status experimental
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A; Experimental source: thymus
A;Note: sequence extracted from NCBI backbone (NCBIN:121082, NCBIP:121083)
C;Genetics:
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Pred. No. 0.72;
1; Mismatches
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A;Molecule type: DNA
A;Residues: 1-92 < DU2>
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60.0%;
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C;Superfamily: gonadoliberin
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Best Local Similarity
Matches 6; Conserv
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Best Local Similarity
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Matches
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                                                               Rivan, L.; Rousseau, P. Biochem. Biophys. Res. Commun. 109, 1061-1071, 1982
Ajritle: The chemical identity of the immunoreactive LHRH-like peptide biosynthesized in A; Reference number: A90108; MUID:83126573; PMID:6760865
A; Accession: A90108
A; Molecule type: protein
A; Residues: 24-33 cTAN-A; Experimental source: placental trophoblasts
R; Lobiovitz, D.; Koch, Y; Pitzer, F.; Fridkin, M.; Dantes, A.; Baumeister, W.; Amsterda A; Title: Sequential degradation of the neuropeptide gonadotropin-releasing hormone by the A; Contents: annotation; degradation pathway of synthetic hormone
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C.Function:
A.Description: gonadoliberin stimulates pituitary secretion of lutropin and follitropin
A.Description: gonadoliberin-associated protein may have prolactin release inhibiting activiy
C.Superfamily: gonadoliberin
C.Superfamily: gonadoliberin
C.Superfamily: gonadoliberin
C.Superfamily: gonadoliberin
F.24-92/Droduct: progonadoliberin #status predicted <PGN>
F.24-92/Product: gonadoliberin #status predicted <PGN>
F.24-33/Product: gonadoliberin #status experimental <AMI>
F.34-32/Product: gonadoliberin associated protein #status predicted <GAP>
F.34-32/Product: gonadoliberin associated protein #status predicted cGAP>
F.34-33/Modified site: pyrrolidone carboxylic acid (GlN) (in mature form) #status experiment F;33/Modified site: amidated carboxyl end (Gly) (amide in mature form from following gly)
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NyAlternate names: gonadoliberin-associated protein (GAP); gonadotropin releasing hormon
NyAlternate names: gonadoliberin-associated protein (GAP); gonadotropin releasing hormon
NyContains: gonadoliberin; prolactin release-inhibiting factor
C;Species: Rattus norvegicus (Norway rat)
C;Species: Rattus norvegicus (Norway rat)
C;Date: 3.1-Var-1988 #sequence revision 31-Mar-1988 #text_change 18-Jun-1999
C;Accession: A40147; B26173; A48410
R;Bond, C.T.; Hayflick, J.S.; Seeburg, P.H.; Adelman, J.P.
R;Bond, C.T.; Hayflick, J.S.; Seeburg, P.H.; Adelman, J.P.
A;Title: The rat gonadotropin-releasing hormone: SH locus: structure and hypothalamic ex
A;Reference number: A40147; MUID:89384661; PMID:2476669
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A;Molecule type: DNA
A;Molecule type: DNA
A;Molecule type: DNA
A;Molecule type: ABM31670; NID:g204447; PIDN:AAA41264.1; PID:g204448
R;Adelman, J.P.; Mason, A.J.; Hayflick, J.S.; Seeburg, P.H.
R;Adelman, J.P.; Mason, A.J.; Hayflick, J.S.; Seeburg, P.H.
A;Title: Isolation of the gene and hypothalamic CDNA for the common precursor of gonadot A;Reference number: A94090; MUID:86094338; PMID:2867548
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Ajaccession: B26173
Ajaccession: B26173
Ajaccession: S2 ADB.
Ajaccession: S2 ADB.
Ajaccescores: GB.M12579; NID:g204445; PIDN:AAA41263.1; PID:g204446
R;Maior, C.C.; Marchetti, B.; LeBoeuf, R.D.; Blalock, J.E.
Ajacces. C.C.; Marchetti, B.; LeBoeuf, R.D.; Blalock, J.E.
Ajacces. C.C.; Marchetti, B.; Add. 1992
Ajacces. C.C.; Marchetti, B.; Add. 1993
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     A,Cross-references: GB:X01059; NID:g34356; PIDN:CAA25526.1; PID:g34357
A,Experimental source: placenta
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A;Cross-references: GDB:133746; OMIM:227200; OMIM:152760
A;Mp position: 8p21-8p11.2
A;Introns: 47/3; 79/3
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A;Molecule type: mRNA
A;Residues: 1-92 <MAI>
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C; Accession: A46030

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Query Match Best Local Similarity 6; Conserv?

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R;Lovejoy, D.A.; Fischer, W.H.; Ngamvongchon, S.; Craig, A.G.; Nahorniak, C.S.; Peter, I Proc. Natl. Acad. Sci. U.S.A. 89, 6373-6377, 1992
A;Title: Distinct sequence of gonadotropin-releasing hormone (GnRH) in dogfish brain proc. A;Reference number: A46030; MUID:92335300; PMID:1631133
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C;Species: Oncorhynchus tschawytscha (chinook salmon)
C;Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 09-Aug-1997
C;Accession: 151092
R;Klungland, H:, Lorens, J.B.; Andersen, O.; Kisen, G.O.; Alestrom, P.
Mol. Cell. Endocrinol. 84, 167-174, 1992
A;Title: The Allantic salmon prepro-gonadotropin releasing hormone gene and mRNA. A;Reference number: 151040; MUID:92267241; PMID:1587389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C.Species: Oncorhynchus Keta (chum salmon)
C.Date: 10-Aug-1990 #sequence_revision 10-Aug-1990 #text_change 18-Jun-1993
C.Accession: A21114
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A;Molecule type: protein
A;Residues: 1-10 ·LOV>
C;Keywords: hormone; pyroglutamic acid
P;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
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A;Title: Characterization of a teleost gonadotropin.releasing hormone. A;Reference number: A21114; MUID:83195140; PMID:6341999
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Pred. No. 0.88;
1; Mismatches 3; Indels
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C,Genetics:
A,Gene: GnRH
A,Introns: 38/3; 65/3
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gonadoliberín - chum salmon
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A, Accession: A21114
A, Status: preliminary
A, Molecule type: protein
A, Residues: 1-10 <SHE>
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Best Local Similarity
Matches 6; Conserv
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Matches 6; Conserv
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Matches 6; Conserv
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B46030
gonadoliberin II - spiny dogfish
NyAleernate names: gonadotropin-releasing hormone
C;Species: Squaduus acanthias (spiny dogfish)
C;Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 20-Jan-2003
C;Accession: B46030
C;Ac
                                                                                                                                                                                                                                                                                                               RESULT 14
A61126
gonadoliberin - spotted ratfish
N;Alternate names: gonadorropin-releasing hormone
C;Species: Hydrolagus collie! (spotted raffish)
C;Date: 26-May-1994 #sequence_revision 26-May-1994 #text_change 18-Mar-1997
C;Accession: A61126
C;Accession: A61126
C;Accession: A61126
A;File: Primary structure of gonadotropin-releasing hormone from the brain of a holocep
A;File: Primary structure of gonadotropin-releasing hormone from the brain of a holocep
A;File: Primary structure
A;Accession: A61126
A;Molecule type: protein
A;Recession: A61126
A;Reperimental source: brain
C;Superfamily: gonadoliberin
C;Superfamily: gonadoliberin
C;Superfamily: gonadoliberin
C;Moyords: amidated carboxyle acid (Gln) #status experimental
F;10/Modified site: amidated carboxyl end (Gly) #status experimental
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NyAlternate names: gonadotropin-releasing hormone
NyAlternate names: gonadotropin-releasing hormone
C;Species: Squalus acanthias (spiny dogfish)
C;Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 16-Dec-1998
                                                                                 Gaps
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Pred. No. 0.11;
1; Mismatches 3; Indels
                  Length 10;
                                                                                 3; Indels
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           Score 40; DB 1;
Pred. No. 0.11;
1; Mismatches
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Pred. No. 0.11;
1; Mismatches
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Best Local Similarity 60.0
Matches 6; Conservative
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1 EHWSXGXXPG 10

Best_Local Similarity Matches 6; Conserv

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1 EHWSXGXXPG 10 QHWSHGWYPG 10

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gonadotropin-releasing hormone - brown trout
C;Species: Salmo trutta (brown trout)
C;Species: Salmo trutta (brown trout)
C;Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 21-Jul-2000
C;Accession: 151365
R;Klungland, H.; Lorens, J.B.; Andersen, O.; Kisen, G.O.; Alestrom, P.
Mol. Cell. Endocrinol. 84, 167-174, 1992
A;Title: The Atlantic salmon prepro-gonadotropin releasing hormone gene and mRNA.
A;Reference number: 151040; MUD:92267241; PMID:1587389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gonadotropin releasing hormone - brook trout
C;Species: Salvelinus fontinalis (brook trout)
C;Date: 04-Sep-1997 #sequence_revision 04-Sep-1997 #text_change 05-Nov-1999
C;Accession: 15:131
R;Klungland, H; Lorens, J.B.; Andersen, O.; Kisen, G.O.; Alestrom, P.
A;C;C: The Aclantic salmon prepro-gonadotropin releasing hormone gene and mRNA.
A;Reference number: 15:1040; MUID:92267241; PMID:1587389
A;Molecule type: DNA
A;Residues: 1-82 <KL2>
A;Cross-references: EMBL:X74957; NID:g402786; PIDN:CAA52912.1; PID:g402787
C;Genetics:
A;Gene: GnRH
A;Introns: 46/3; 73/3
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A; Residues: 1-82 <KLU>
A; Cross-references: EMBL:X79712; NID:G499336; PIDN:CAA56151.1; PID:G499337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Cross-references: EMBL:X79713; NID:g499343; PIDN:CAA56152.1; PID:g499344
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                                                                                                                                                                        Length 82;
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A;Molecule type: DNA
A;Residues: 1-82 <KLU>
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60.0%; Pred. No. 0.98;
iive 1; Mismatches
                                                                                                                                                                      Score 40; DB 2;
Pred. No. 0.98;
1; Mismatches
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Pred. No. 0.98;
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Best Local Similarity 60.0
Matches 6; Conservative
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Matches 6, Conservative
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Best Local Similarity
6, Conserve
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A;Introns: 46/3; 73/3
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               Account 19 of the procession of the process of the physiologic regulators of considering the physiologic releasing hormone precursor - Japanese medaka Chicken-II-type gonadotropin-releasing hormone precursor - Japanese medaka Chacession: JC79394 #sequence_revision 17-Nov-2000 #text_change 20-Jan-2003 Chacession: JC79394 #sequence_revision 17-Nov-2000 #text_change 20-Jan-2003 F; Accession: JC79394 #sequence_revision of Commun. 276, 298-303, 2000 #text_change 20-Jan-2003 #sichem: Biophys. Res. Commun. 276, 298-303, 2000 #sprinter in the medaka, Oryzias latipes. A; Contents: Brain A; Accession: JC73934 #sprinter in the medaka, Oryzias latipes. A; Accession: JC73934 #sprinter in the medaka oryzias latipes. A; Accession: JC73934 #sprinter in the medaka oryzias latipes. A; Accession: JC73934 #sprinter in the medaka oryzias latipes. A; Contents: Brain A; Contents: Brain A; Contents: Brain A; Contents: Commant: This protein with the roles as the physiologic regulator of gonadotropin relections:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gonadotropin-releasing hormone - cherry salmon
(Species: Oncorhynchus masou (cherry salmon)
(Species: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 20-Jan-2003
(Shacession: 151180
R.Suzuki, M.; Hyodo, S.; Kobayashi, M.; Aida, K.; Urano, A.
J. Mol. Endocrinol. 9, 73-82, 1992
A;Title: Characterization and localization of mRNA encoding the salmon-type gonadotrophi
A;Reference number: 151180; MUID:92384893; PMID:1515027
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Pred. No. 0.98;
1; Mismatches 3; Indels
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Pred. No. 0.95;
1; Mismatches 3; Indels
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A;Accession: I51355
A;Status: preliminary; translated from GB/EMBL/DDBJ
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A;Molecule type: mRNA
A;Residues: 1-82 SUZS.
A;Cross-references: GB:S44614; NID:g254824; PID:g254825
C;Superfamily: gonadoliberin
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S:Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-82 <KLU>
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Best Local Similarity 60.0%;
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 60.0
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                      A,Gene: cgnrh-11
C,Superfamily: gonadoliberin
C,Keywords: brain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 EHWSXGXXPG 10
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24 QHWSYGWLPG 33
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C;Species: Chrysophrys major (red sea bream)
C;Species: Chrysophrys major (red sea bream)
C;Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 21-Jul-2000
C;Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 21-Jul-2000
C;Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 21-Jul-2000
S;Accession: Endoscrinol. 96, 234-242, 1994
A;Title: Molecular cloning of a cDNA encoding the prepro-salmon gonadotropin-releasing }
A;Reference number: I51095, MUID:95154651; PMID:7851723
A;Accession: I51095
A;Status: preliminary: translated from GB/EMBL/DDBJ
Rjokubo, K.; Amano, M.; Yoshiura, Y.; Suetake, H.; Aida, K.
Balochem, Blophyas, Res. Commun. 276, 298-303, 2000
A;Title: A novel form of gonadotropin-releasing hormone in the medaka, Oryzias latipes. A;Reference number: JC7393
A;Rontedarts: Brain
A;Accession: JC7395
A;Molecule type: mRNA
A;Residues: 1-90 cOKUA
A;Residues: 1-90 cOKUA
A;Cross-references: DDBJ:AB041331
C;Comment: This protein with the roles as the physiologic regulator of gonadotropin rel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C,Accession: A22735
R;Bond, C.T.; Francis, R.C.; Fernald, R.D.; Adelman, J.P.
R,Bond, C.T.; Francis, R.C.; Fernald, R.D.; Adelman, J.P.
A)Title: Characterization of complementary DNA encoding the precursor for gonadotropin-: A,Reference number: A23735; MUID:92049375; PMID:1944299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gonadoliberin precursor - Cichlid (Haplochromis burtoni)
C;Species: Haplochromis burtoni
C;Date: 30-Dec-1991 #sequence_revision 30-Dec-1991 #text_change 18-Jun-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Molecule type: mRNÅ
A;Residues: 1-90 <OKU>
A;Cross-references: GB:D26108; NID:g685222; PIDN:BAA05104.1; PID:g685223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A,Accession: A23735
A,Status: preliminary; not compared with conceptual translation
A,Molecule type: mRNA
A,Molecule type: mRNA
A,Residues: 1-90 < RONS
F;24-33/Product: gonadoliberin #status predicted < GLB>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 40; DB 2; Length 90;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 90
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Pred. No. 1.1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 40; DB 2
Pred. No. 1.1;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pred. No. 1.1;
1; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         80.08;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 60.0
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 EHWSXGXXPG 10
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Best Local Similarity
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Best Local Similarity
Matches 6; Conserv
                                                                                                                                                                                                                                                                                                                                             C,Genetics:
A,Gene: sgnrh
C,Keywords: brain
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Matches
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RHIDTS

GONDAGOLIPPETIN II precursor - sharptooth catfish

N.Alternate names: gonadoliberin, chicken-type; gonadotropin-releasing hormone II (GRBH-N)/chains: gonadoliberin II; gonadoliberin II associated protein

C.Species: Clarias gariepinus (sharptooth catfish)

C.Date: 30-69-1993 #sequence revision 18-Mar-1997 #text_change 18-Jun-1999

C.Accession: S45600; JC1243; S42915

R.Bogord, J.; Zandbergen, T.; Andersson, E.; Goos, H.

B.Y. Title: Isolation, characterization and expression of cDNAs encoding the catfish-type a
A.Fitle: Isolation, characterization and expression of cDNAs encoding the catfish-type a
A.Fitle: Isolation, characterization and expression of cDNAs encoding the catfish-type a
A.Fitle: Isolation, characterization and expression of cDNAs encoding the catfish-type a
A.Fitle: Isolation, characterization and expression of cDNAs encoding the catfish-type a
A.Fitle: Isolation, characterization and expression of cDNAs encoding the catfish-type a
A.Fitle: Isolation: Associate and A.Fitle: Two gonadoliberin lsg, 127-134, 1992
A.Fitle: Two gonadoliberin
C.Keywords: and acute contact and the contact and acute acute and acute acute and acute acute and acute acute and acute and acute and acute and acute acute acute and acute acute and acute acute and acute and acute acute and acute and acute and acute acute and acute acute and acute and acute acute acute and acute and acute acute acute and acute acute and acute acute and acute acute and acute acute acute acute acute and acute acute acute and acute acut
                         Goradoliberin II precursor - Cichlid (Haplochromis burtoni)
C.Species: Haplochromis burtoni
C.Species: Haplochromis burtoni
C.Species: E3-Aug-1995 #sequence_revision 25-Aug-1995 #text_change 16-Jul-1999
C; Accession: A53453
R; White S.A.; Bond, C.T.; Francis, R.C.; Kasten, T.L.; Fernald, R.D.; Adelman, J.P.
Proc. Natl. Acad. Sci. U.S.A. 91, 1423, 1427, 1994
A; Title: A second gene for gonadotropin-releasing hormone: cDNA and expression pattern A; Reference number: A53453
A; Accession: A53453
A; Accession: A53453
A; Accession: A53453
A; Accession: Bc. Amin,
A; Residues: 1-85 < WHI.>
A; Residues: 1-85 < WHI.>
A; Cross-references: GBL27435; NID: G439868; PIDN: AAA74993.1; PID: g439869
C; Superfamily: gonadoliberin
C; Keywords: brain; hormone
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C;Species: Oryzias latipes (Japanese medaka)
C;pate: 17-Nov-2000 #sequence_revision 17-Nov-2000 #text_change 17-Nov-2000
C;Accession: JC7335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 80.0%; Score 40; DB 2; Length 85; 60.0%; Pred. No. 1; in Mismatches 3; Indels
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Best Local Similarity 60.0
Matches 6; Conservative
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Matches 6; Conservative
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OHWSHGWYPG 34
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gonadotropin-releasing hormone III - sea lamprey
C;Species: Petromyzon marinus (sea lamprey)
C;Date: 19-Dec-1993 #sequence_revision 18-Nov-1994 #text_change 03-Mar-1995
C;Accession: A49187
R;Sower, S. A.; Chiang, Y.C.; Lovas, S.; Conlon, J.M.
R;Sower, S. A.; Chiang, Y.C.; Lovas, S.; Conlon, J.M.
A;Sower, S. A.; Chiang, Y.C.; Lovas, S.; Conlon, J.M.
A;Title: Primary structure and biological activity of a third gonadotropin-releasing hor A;Reference number: A49187; MUID:93178316; PMID:8440174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A,Molecule type: mRNA
A,Residues: 32-23 <THO>
A,CRESIANES-references: GB:L17127; NID:g310213; PIDN:AAA42054.1; PID:g310214
A,Note: the authors translated the codon CAG for residue 74 as Glu, CAA for residue 78 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Molecule type: mRNA
A; Mesidues: 1.40, 'P', 42-49,'V',51-59,'S',61-79,'L',81,'N',83-85,'F',87-88,'L',90-140 <TH
A; A; Mesidues: 1.40, 'P',42-49,'V',51-59,'S',61-79,'L',81,'N',83-85,'F',87-88,'L',90-140 <TH
A; Experimental source: liver
A; Experimental source: liver
A; Note: the authors translated the codon TCC for residue 60 as Phe, CTC for residue 80 a
Glu, CAA for residue 109 as Glu, and CAG for residue 113 as Glu
C; Complex: multimeric proteinase complex; cylindrical structure is made up of four stack
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A,Description: endopeptidase; peptidylglutamyl-peptide hydrolase activity
A,Pathway: protein degradation
A,Note: constitutes the major non-lysosomal proteolytic machinery; requires covalent lin
C,Superfamily: proteasome endopeptidase complex, beta subunit
C,Keywords: ATP; hydrolase; proteasome; protein degradation; proteinase
F,1-31/Domain: propeptide #status predicted <PRO>
F,32-263/Product: multicatalytic endopeptidase complex chain N3 #status predicted <MAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protessome endopeptidase complex (EC 3.4.25.1) beta-type chain N3 precursor - rat N,Alternate names: protessome beta-type chain N3; protessome chain N3 C;Species: Rattus norvegicus (Norvay rat)
C;Species: Rattus norvegicus (Norvay rat)
C;Accession: 532507; 869598
R;Thomson, S.; Balson, D.F.; Rivett, A.J.
A;Title: cDNA cloning of a new type of subunit of mammalian protessomes.
A;Reference number: 832507; MUID:93245975; PMID:8482379
A;Accession: 832507.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R;Thomson, S.; Rivett, A.J.
Bicchem. J. 315, 733-738, 1996
A;Title: Processing of N3, a mammalian proteasome beta-type subunit.
A;Reference number: 869598; MUID:96220681; PMID:8645151
A;Accession: S69598
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Pred. No. 18;
1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4; Indels
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A;Molcule (rype: profein
A;Residues: 1-10 <80W3
A;Residues: 1-10 <80W3
A;Reperimental source: brain
A;Note: sequence extracted from NCBI backbone (NCBIP:126381)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 36; DB 2;
Pred. No. 0.63;
0; Mismatches
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Best Local Similarity 60.0%;
Matches 6; Conservative
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Best Local Similarity 55.6
Matches 5; Conservative
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A;Retus: preliminary
A;Retus: preliminary
A;Residues: 1-1000 <SIM>
A;Cross-references: GB:AE004006; GB:AE003849; NID:g9106932; PIDN:AAP84657.1; GSPDB:GN001
A;Bxperimental Source: strain 9a5c
R;Simpson, A.J.G.; Reinach, F.C.; Arruda, P.; Abreu, F.A.; Acencio, M.; Alvarenga, R.; A
R;Simpson, A.J.G.; Reinach, F.C.; Arruda, P.; Abreu, F.A.; Rereira, A.J.S.
Budones, M.S.; Benno, M.R.P.; Camargo, A.A.; Carraro, D.M.; Carrer, H
as-Neto, E.; Docena, C.; El-Dorry, H.; Facincani, A.P.; Franca, A.J.S.
Submitted to GenBank, June 2000
A,Authors: Ferreira, V.C.A.; Ferro, J.A.; Fraga, J.S.; Franca, S.C.; Franco, M.C.; Frohm
J.D.; Junqueira, M.L.; Kemper, E.L.; Kitajima, J.P.; Krieger, J.E.; Kuramae, E.E.; Laigr
Chado, M.A.; Madeira, A.M.B.N.; Madeira, H.M.F.; Marion, C.L.; Marques, M.V.; Martins, E.M.F.; Matsukuma, A.Y.; Menck, C.F.M.; Miracca, E.C.; Miyaki, C.Y.;
F.G.; Nunes, L.R.; Ollveira, M.A.; de Ollveira, M.C.; de Ollveira, R.C.; Palmieri, D.A.
A;Authors: da Silva, A.C.R.; da Silva, F.R.; da Silva, A.M.; Silva Jr., W.A.; Gelliada, S.; Vettore, A.L.; Z.
A;Reference number: A59328
A;Reference number: A59328
RESULT 29

Gestain proteinase XF1851 [imported] - Xylella fastidiosa (strain 9a5c)

Serial proteinase XF1851 [imported] - Xylella fastidiosa

C;Species: Xylella fastidiosa

C;Date: 18-Aug-2000 #sequence_revision 20-Aug-2000 #text_change 24-Nov-2003

C;Accession: C82630

R;Anonymous, The Xylella fastidiosa Consortium of the Organization for Nucleotide Sequent A;Tills7, 2000

A;Tills: The genome sequence of the plant pathogen Xylella fastidiosa.

A;Reference number: A82515; MUID:20365717; A;Note: for a complete list of authors see reference number A59328 below
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hypothetical protein At2g31040 [imported] - Arabidopsis thaliana
hypothetical protein At2g31040 [imported] - Arabidopsis thaliana
C;Species Arabidopsis thaliana (mouse-ear cress)
C;Species Arabidopsis thaliana (mouse-ear cress)
C;Accession: G84715
A;Accession: G84715
A;Accession: G84715
A;Accession: G84715
A;Accession: G84715
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C,Superfamily: Autotransporter subtilisin-like protease precursor; subtilisin homology
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A;Notatus: preliminary
A;Notatus: 1-350 STO>
A;Cross-references: GB:AE002093; NID:g3746067; PIDN:AAC63842.1; GSPDB:GN00139
C;Genetics:
A;Gene: At2g31040
A;Map position: 2
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Best Local Similarity 60.0
Matches 6; Conservative
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Matches 6; Conserv
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NiAlternate names: 3-deoxyglucosone reductase 3; aldose reductase C;Species: Macaca fuscata (Japanese macaque) C;Date: 19-Mar-1997 #sequence_revision 05-Dec-1997 #text_change 12-Feb-1999 C;Accession: 839779 #sequence_revision 05-Dec-1997 #text_change 12-Feb-1999 C;Accession: 839779 #sequence_revision 05-Dec-1997 #text_change 12-Feb-1999 C;Accession: 839779 #sequence_reductase: 1:Species is 1993 Arithe Monkey 3-deoxyglucosone reductase: tissue distribution and purification of three algose reductase. A;Reference number: 839779; MUID:94099609; PMID:8274014 A;Accession: 839779 #sortein A;Accession: 839779 #sortein A;Residues: 1-10;11-52;53-61;62-72;73-80 <SAT>A;Accession: Sayarource: kidney A;Accession: species is not identified by the authors; the most probable species is shown C;Superfamily: aldehyde reductase C;Keywords: blocked amino end; monomer; NADP; oxidoreductase
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NyAlternate names: 20alpha-hydroxysteroid dehydrogenase (EC 1.1.1.149); aldose reducta
C;Species primigenius taurus (cattle)
C;Date: 20-Apr-2000 #sequence revision 20-Apr-2000 #text_change 20-Apr-2000
C;Accession: A35452; A48316; A46379
E;Schade, S.Z.; Early, S.L.; Milliams, T.R.; Kezdy, F.J.; Heinrikson, R.L.; Grimshaw, J. Biol. Chem. 265, 3628-3635, 1990
A;Title: Sequence analysis of bovine lens aldose reductase.
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A;Note: the nucleotide sequence was submitted to the EMBL Data Library, February 1992
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C;Superfamily: succinate dehydrogenase chain 3
C;Keywords: mitochondrion; oxidoreductase; transmembrane protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       / Match 70.0%; Score 35; DB 2; Length 80; Local Similarity 55.6%; Pred. No. 8.3; Assured to 5; Conservative 0; Mismatches 4; Indels
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A,Residues: 1-315 <50Hs
A,Experimental source: lens
R,Petrash, J.M.; Favello, A.D.
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128 QHWSNGQIP 136
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Best Local S:
Matches 5
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Matches
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A95262

probable formate dehydrogenase (EC 1.2.1.2) alpha chain FdoG [imported] - Sinorhizobium C;5pecies: Sinorhizobium mellioti
C;5pecies: Sinorhizobium mellioti
C;5pecies: Sinorhizobium mellioti
C;5pecies: Sinorhizobium mellioti
C;5pecies: Sinorhizobium mellioti
C;5pecies: Sinorhizobium mellioti
C;5pecies: Sinorhizobium mellioti
C;5pecies: Sinorhizobium mellioti
C;Accession: A55262
K;Barnett, M.J.; Fisher, R.F.; Jones, T.; Komp, C.; Abola, A.P.; Barloy-Hubler, F.; Bowe
V; Kalman, S.; Keating, D.H.; Palm, C.; Peck, M.C.; Surzycki, R.; Wells, D.H.; Yeh, K.C.
A;Title: Nucleotide sequence and predicted functions of the entire Sinorhizobium melliot
A;Title: Nucleotide sequence and predicted functions of the entire Sinorhizobium melliot
A;Title: Predicted Sinorhizobium melliot
A;Residues: 1-1034 KUR>
A;Reference 293, 666-672, 2001
A;Reference number: A96039; MUD:21368234; PMID:11474104
A;Contents: annotation
A;Generics: 4400
                                                                                                                                                                                                                                                                                                                                                                                             May
                                                           RESULT 33
T08556
Typothetical protein F27B13.190 - Arabidopsis thaliana
Cypothetical protein F27B13.190 - Arabidopsis thaliana
Cybecies: Arabidopsis thaliana (mouse-ear cress)
Cybecies: Arabidopsis thaliana (mouse-ear cress)
Cybecies: Towns 1989 #sequence_revision 11-Jun-1999 #text_change 22-Oct-1999
Cybecies: Towns 198556
Rybevan, M.; Zimmermann, W.; Grueneisen, A.; Wambutt, R.; Bancroft, I.; Mewes, H.W.; Ryberice number: Z16442
AyRolecule to the Protein Sequence Database, May 1999
AyRolecule type: DNA
AyResidues: 1-828 <BEV>
AyRolecule type: DNA
AyResidues: 1-828 <BEV>
AyColecule type: DNA
AyColecule type: Columbia; BAC clone F27B13.190
CyGenetics: ATSP:F27B13.190
AyGone AyColecule Type: AyColecule Type: DNA
AyGone AyColecule Type: DNA
AyGone Towns T
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 36; DB 2; Length 828;
Pred. No. 60;
0; Mismatches 4; Indels
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C,Superfamily: formate dehydrogenase
C,Keywords: oxidoreductase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Map position: 4
A;Introns: 52/2; 87/1; 146/1; 777/3
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Matches 6; Conservative
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Best Local Similarity
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S39779
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;Molecule type: protein
;Residues: 131-157, XX',160-162 <FER>
;Morjana, N.A.; Lyons, C.; Flynn, T.G.
* Biol. Chem. 254, 2912-2919, 1989
;Title: Aldose reductase from human psoas muscle. Affinity labeling of an active site l
;Reference number: A31432; MUID:89123393; PMID:2492527
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C;Species: Rattus norvegicus (Norway rat)
C;Species: Rattus norvegicus (Norway rat)
C;Species: Rattus norvegicus (Norway rat)
C;Accession: A60603; S00079; B60603; I53849
R;Carper, D.A.; Wistow, G.; Mishimura, C.; Graham, C.; Watanabe, K.; Fujii, Y.; Hayashi, R;Carper, D.A.; Wistow, G.; Mishimura, C.; Graham, C.; Watanabe, K.; Fujii, Y.; Hayashi, A;Title; Vangerfamily of NapH-dependent reductases in eukaryotes and prokaryotes.
A;Reference number: A60603; MUID:90005742; PMID:2507340
A;Accession: A60603
                                                                                                                                                                                                                                                                                                                                          A, Molecule type: mRNA
A, Residues: 1.4, T., 6-316 < CHU>
A, Residues: 1.4, T., 6-316 < CHU>
A, Cross-references: GB: 005017; NID: 9178488; PIDN: AAAS1714.1; PID: 9178489
R;Nishimura, C.; Matsuura, Y.; Kokai, Y.; Akera, T.; Carper, D.; Morjana, N.; Lyons, C.;
Biol. Chem. 265, 9788-9792, 1990
A, Title: Cloning and expression of human aldose reductase.
A, Reference number: A36436; MUID: 90277668; PMID: 2112546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Molecule type: protein
A;Residues: 244-275 <MOR>
R;Liu, S.Q.; Bhatnagar, A.; Ansari, N.H.; Srivastava, S.K.
Biochim. Biophys. Acta 1164, 268-272, 1993
A;Title: Identification of the reactive cysteine residue in human placenta aldose reduct
A;Reference number: S39368; MUID:93344424; PMID:8343525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;Cross_references: GB:U05474; NID:g178490; PIDN:AAA51715.1; PID:g178491; Ferraretto, A.; Negri, A.; Giuliani, A.; de Grada, L.; Fuhrman Conti, A.M.; Ronchi, S. iochim. Bopphys. Acta 1175, 283-288; 1993; Pichim. Biophys. Acta 1175, 283-288; 1993; Pitle: Aldose reductase is involved in long-term adaptation of EUE cells to hyperosmot; Reference number: $29630; MUID:93168787; PMID:8435445
R;Chung, S.; LaMendola, J. A. 1989
J. Biol. Chem. 264, 14775-14777, 1989
A;Title: Cloning and sequence determination of human placental aldose reductase gene.
A;Reference number: A36510; MUID:89359274; PMID:2504709
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0; Mismatches
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A,Map position: 7q35-7q35
C,Superfamily: aldehyde reductase
C,Keywords: NADP, oxidoreductase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 35;
Pred. No.
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A,Residues: 298-306,'M',308-316 <LIU>
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Best Local Similarity 55.6.
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Status: preliminary
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                                                                                                                                             A; Accession: A40316
A; Accession: A40316
A; Molecule type: mRNA
A; Accession: A40316
A; Molecule type: mRNA
A; Cross-references: GB:M1463; NID:g162651; PIDN:AAA30370.1; PID:g162652
B; Warren, J.C.; Murdock, G.L.; Ma, Y.; Goodman, S.R.; Zimmer, W.E.
B; Cross-references: GB:M1463; MID:g3160176; PMID:g431420
A; Title: Molecula roloning of testicular 20 alpha-hydroxysteroid dehydrogenase: identity
A; Reference number: A46379; MUID:g3160176; PMID:g431420
A; Residues: 9-315 «WRA
A; Resi
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A; Molecule type: mRNÅ
A; Residues: 1-316 < ROBJ-)
B; Caroas-references: GB: 30.04795; NID: g178486; PIDN: AAA51713.1; PID: g178487
B; Grundmann, U.; Bohn, H.; Obermeier, R.; Amann, E.
B) A; Caroll Biol. 9, 149-157, 1990
A; Title: Cloning and prokaryotic expression of a biologically active human placental ald A; Reference number: A34583; MUID: 90253609; PMID: 2111143
A; Recession: A34583
A; Statues: preliminary
A; Statues: preliminary
A; Residues: 1-316 < GRU>
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A,Molecule type: mRNA
A,Residues: 1-316 <GRA2>
A,Cross-references: EMBL:X15414; NID:g28646; PIDN:CAA33460.1; PID:g28647
R;Bohren, K.M.; Bullock, B.; Wermuth, B.; Gabbay, K.H.
B, Biol. Chem. 264, 9547-9551, 1989
A,Title: The aldo-keto reductase superfamily. cDNAs and deduced amino acid sequences of A,Reference number: A33851; MUID:89255461; PMID:2498333
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A;Readdudes: 1-316 <GRS.MS9856; GB:MS9783; NID:G178483; PIDN:AAA51712.1; PID:G178485
A;Cross-references: GB:MS9856; GB:MS9783; NID:G178483; PIDN:AAA51712.1; PID:G178485
A;Cross-references: GB:MS9856; GB:MS9783; NID:G178483; PIDN:AAA51712.1; PID:G178485
R;Graham, A.; Hedge, P.J.; Powell, S.J.; Riley, J.; Brown, L.; Gammack, A.; Carey, F.; INucled: A;Res. 17, 8358, 1389
Nucled: Acids Res. 17, 8358, 1389
A;Trile: Nucleotide sequence of CDNA for human aldose reductase.
A;Reference number: S06591; MUID:90045960; PMID:2510130
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A39763
aldehyde reductase (EC 1.1.1.21) [validated] - human
aldehyde reductase (EC 1.1.1.21) [validated] - human
aldehyde reductase (EC 1.1.1.21) [validated] - human
by Alternate names: aldese reductase
C;Species: Homo sapiens (man)
C;Date: 08-Dec-2000 #sequence revision 08-Dec-2000 #text_change 08-Dec-2000
C;Accession: A39763; So6591; B33851; A34583; A36510; A36436; S29630; A31432; S39368
R;Graham, A.; Brown, L.; Hedge, P.J.; Gammack, A.J.; Markham, A.F.
A;Tile: Structure of the human aldese reductase gene.
A;Reference number: A39763; MUID:91201333; PMID:1901857
                        Curr. Eye Res. 8, 1021-1027, 1989
A,Title: Isolation and characterization of cDNA clones encoding aldose reductase.
A,Reference number: A48316; MUID:90125780; PMID:2515032
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A; Contents: annotation; X-ray crystallography, 3.0 angstroms, residues 2-98, 'D', 100-316
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A;Experimental source: strain Bristol N2; clone K05F6
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C;Species: Cemorhabditis elegans
C;Date: 29-Oct-1999 #sequence_revision 29-Oct-1999 #text_change 29-Oct-1999
C;Accession: T32849
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A, Status: preliminary; translated from GB/EMBL/DDBJ
A, Molecule type: mRNA
A, Residues: 1-316 < RES>
A, Cross-references: GB-D32250; NID:g1384073; PIDN:BAA06980.1; PID:g786001
C, Superfamily: aldehyde reductase
C; Keywords: NADP; oxidoreductase
                                                                                                                                                      C;Superfamily: aldehyde reductase
C;Keywords: accerylated amino end; oxidoreductase
F;2-316/Product: aldehyde reductase #status experimental <MAT>
F;2/Modified site: acetylated amino end (Ala) (in mature form) #status
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Pred. No. 34;
0; Mismatches 4; Indels
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55.6%; Pred. No. 34;
tive 0; Mismatches 4; Indels
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submitted to the EMBL Data Library, December 1997
A;Description: The sequence of C. elegans cosmid KO5F6.
A;Reference number: Z21233
A;Reference number: Z21233
A;Reference number: Z21233
A;Secession: T32849
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Rolecule type: DNA
A;Residues: 1-532 cDDZ
A;Residues: 1-532 cDDZ
A;Residues: 1-532 cDDZ
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50.0%; Pred. No. 59;
live 1; Mismatches
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A,Map position: 2
A,Introns: 194/3; 290/1; 334/2; 430/1
               A;Reference number: A52185; PDB:1DLA
                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 55.6%;
Matches 5; Conservative
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438 KHWIAGLKPG
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ASSOLT ACCRECATE CONTROL (Validated) - pig
ASSOLT ACCRECATE CONTROL (Admessic pig)
C.Species: Sus scrota domestic pig)
R.Kubieses; Sus scrota ASSOLS; AS
R;Carper, D.; Nishimura, C.; Shinohara, T.; Dietzchold, B.; Wistow, G.; Craft, C.; Kador Press Lett. 220, 209-213, 1987
A;Title: Aldose reductase and rho-crystallin belong to the same protein superfamily as a A;Reference number: 800079; WUID:87276556; PMID:3111886
A;Accession: 800079
A;Accession: 800079
A;Residues: 33-316 cA2>
A;Residues: 33-316 cA2>
A;Cross-references: EMBL:X05884
A;Note: 45-Ser and 54-Trp were also found
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E sugar alcohol
                                                                                                                                                                                                                                                                                                                                                                    A;Molecule type: protein
A;Molecule type: protein
A;Molecule type: protein
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A;Molecule type: protein
A;Molecule type: part of this sequence was confirmed by protein sequencing
R;Graham, C.E.; Szpirer, C.; Levan, G.; Carper, D.
Gene 107, 259-267, 1391
A;Title: Characterization of the aldose reductase-encoding gene family in rat.
A;Reference number: 153649; MUID: 92084118; PMID: 1748296
A;Recession: 153649; MUID: 92084118; PMID: 1748296
A;Accession: 153649; MUID: 92084118; PMID: 1748296
A;Accession: 153649; MUID: 92084118; PMID: AAA40721.1; PID: g202852
A;Accession: 1-316 exRES-
A;Accoment: Aldose reductase catalyzes reduction of a variety of sugars to sugar alcocycoment: This enzyme is active in the eye lens, where an accumulation of sugar alcocycoment: This enzyme is active in the eye lens, where an accumulation of sugar alcocycoment: This enzyme is active in the eye lens, where an accumulation of sugar alcocycoment: This enzyme is active in the eye lens, where an accumulation of Sylantic C;Gonnett: This endyder leductase
C;Gonnett: This suzyme is active in the eye lens, where such accumulation of Sylantic C;Gonnett: This subydericted
C;Supperfamily: aldehyde reductase
C;Supperfamily: aldehyde reductase
C;Skeywords: eye lens; NaDP; oxidoreductase
C;Steywords: eye lens; NaDP; oxidoreductase
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RESULT 48
T21643
hypothetical protein F32B6.8 - Caenorhabditis elegans
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A;Residues: 1-300 <SCH>
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C;Species: Bacillus halodurans
C;Species: Bacillus halodurans
C;Species: Bacillus halodurans
C;Accession: A8412
R;Takami, H.; Nakasone, K.; Takaki, Y.; Maeno, G.; Sasaki, R.; Masui, N.; Fuji, F.; Hira
Nucleic Acids Res 28, 4317-4317, 2307
A;Ttle: Complete genome sequence of the alkaliphilic bacterium Bacillus halodurans and A;Accession: A8412
A;Accession: A8412
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A;Acc
                                                                                                                                 regulator protein bW2 - smut fungus (Ustilago maydis)
C;Species: Ustilago maydis (corn smut)
C;Species: Ustilago maydis (corn smut)
C;Accession: A42094
R;Gillissen, B.; Bergemann, J.; Sandmann, C.; Schroeer, B.; Boelker, M.; Kahmann, R.
Cell 68, 647-657, 1992
A;Title: A two-component regulatory system for self/non-self recognition in Ustilago may
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transrepressor protein BICP22 - bovine herpesvirus 1
transrepressor protein BICP22 - bovine herpesvirus 1
C;Decies: bovine herpesvirus 1
C;Dete: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 08-Oct-1999
C;Accession: S4117
E;Schwyzer, M.; Wirth, U.V.; Vogt, B.; Fraefel, C.
submitted to the EMBL Data Library, December 1993
A;Description: Transrepressor protein BICP22 of bovine herpesvirus 1 is encoded by a **
A;Reference number: S41171
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A;Molecule type: DNA
A;Molecule type: DNA
A;Rosaidues: 1-626 <GIL>
A;Crosaidues: 1-626 <GIL>
A;Crosarreferences: GB:M84182; NID:g170574; PIDN:AAA34221.1; PID:g170575
A;Note: sequence extracted from NCBI backbone (NCBIN:82507, NCBIP:82508)
C;Superfamily: unassigned homeobox proteins; homeobox homology
C;Keywords: DNA binding; homeobox; nucleus; transcription regulation
F;136-192/Domain: homeobox homology <HOX>
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Best Local Similarity 40.0%;
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A,Status: preliminary
A,Molecule type: DNA
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acid phosphatase (EC 3.1.3.2) precursor, repressible - Aspergillus niger
C;Species: Aspergillus niger
C;Species: Aspergillus niger
C;Date: 31-Mar-1992 #sequence_revision 31-Mar-1992 #text_change 21-Jul-2000
C;Accession: JT0386
R;MacRae, W.D.; Buxton, F.P.; Sibley, S.; Garven, S.; Gwynne, D.I.; Davies, R.W.; Arst J
A;Title: A phosphate-repressible acid phosphatase gene from Aspergillus niger: its cloni
A;Reference number: JT0386; MUID:89138010; PMID:3224828
                                                                                                                                                                                                                                                                                                                                                                                                                                       Gladest reductase homolog - mouse C.Species: Mus musculus (house mouse)
C.Date: 19-May-1995 #sequence_revision 19-May-1995 #text_change 11-Jun-1999
C.Date: 19-May-1995 #sequence_revision 19-May-1995 #text_change 11-Jun-1999
C.Date: 19-May-1995 #sequence_revision 19-May-1995 #text_change 11-Jun-1999
R.Donohue, P.J., Alberts, G.F.; Hampton, B.S.; Winkles, J.A.
J. Biol: Chem. 269, 8664-8669, 1994
A.Fitle: A delaayed-early gene activated by fibroblast growth factor-1 encodes a protein A.Reference number: A53440; MUID:94179253; PMID:7510692
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A,Cross-references: EMBL:X76943, NID:g439626, PIDN:CAAS4262.1, PID:g439627
C,Superfamily: herpesvirus immediate-early protein IE68
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A;Residues: 1-436 <MAC>
A;Krosz-references: GB:M23540; NID:g340936; PIDN:AAA32700.1; PID:g514316
A;Experimental source: ATCC 46951
C;Genetics:
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A;Molecule type: mRNA
A;Residues: 1-316 <-DON>
A;Residues: 1-316 <-DON>
A;Cross-references: GB:U04204; NID:g463376; PIDN:AAA16953.1; PID:g463377
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                                                                                                   Length 300;
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A;Introns: 119/3; 219/1
C;Keywords: phosphoric monoester hydrolase
F;1-20/pomain: signal sequence #status predicted <SIG>
F;21-426/Product: acid phosphatase #status predicted <MAT>
                                                                                                       Score 34; DB 2;
Pred. No. 50;
0; Mismatches
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A; Cross-references: GB: AE005172; NID: g6910572; PIDN: AAF31277.1; GSPDB: GN00141 C; Genetics: A; Map position: 1 C; Superfamily: subtilisin-like proteinase ag12; subtilisin homology
                                                                                                                                                                                                            Score 34; DB 2; Length 763;
Pred. No. 1.3e+02;
0; Mismatches 4; Indels
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Best Local Similarity 55.6%;
Matches 5; Conservative
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  A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-763 <ST
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C;Species: Bacillus halodurans
C;Date: 01-Dec-2000 #sequence_revision 01-Dec-2000 #text_change 15-Jun-2001
C;Accession: H8386
R;Takani, H.; Nakasone, K.; Takaki, Y.; Maeno, G.; Sasaki, R.; Masui, N.; Fuji, F.; Hira
Nucleic Acids Res. 28, 4317-4331, 2000
A;Title: Complete genome sequence of the alkaliphilic bacterium Bacillus halodurans and A;Reference number: A83650; MUDD:20512582; PMID:11058132
A;Accession: H8386
A;Accession: H8386
A;Accession: H8386
A;Accession: H8386
A;Accession: GB:AP001513; GB:BA000004; NID:g10174345; PIDN:BAB05615.1; GSPDB:GNOO
A;Cross-references: grain C-125
C;Genetics:
A;Gene: BH1896
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A;Introns: 12/2; 48/2; 111/1; 151/1; 207/3; 250/3; 272/3; 348/3; 374/1; 416/3; 448/3
C;Superfamily: GTPase activating protein SPBC530.01
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C;Species: Caenorhabditis elegans
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 28-Jul-2000
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 28-Jul-2000
R;Datession: T21643
A;Reference number: Z19453
A;Residues: T21643
A;Residues: 1-495 A;Rul>
A;Residues: CaSP:F32B6.8
A;Reperimental source: clone F32B6
C;Genetics:
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Pred. No. 84;
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RESULT 50
B86454
hypothetical protein F9L11.12 - Arabidopsis thaliana
C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Date: 02-Mar-2001 #sequence_revision 02-Mar-2001 #text_change 31-Dec-2001
C;Accession: B86454
R;Theologis, A.; Ecker, J.R.; Palm, C.J.; Federspiel, N.A.; Kaul, S.; White, O.; Alonso, Chin, C.W.; Chung, M.K.; Conn, L.; Conway, A.B.; Conway, A.R.; Creasy, T.H.; Dewar, K.; ansen, N.F.; Hudjes, B.; Hudzar, L.
Nature 408, 816-820, 2000
A;Authors: Hunter, J.L.; Jenkins, J.; Johnson-Hopson, C.; Khan, S.; Khaykin, E.; Kim, C.C.A.; Li, J.H.; Li, Y.; Lin, X.; Liu, S.X.; Liu, Z.A.; Luros, J.S.; Maiti, R.; Marziali, Rizo, M.; Rooney, T.; Rowley, D.; Sakno, H.
A;Authors: Salzberg, S.L.; Schwartz, J.R.; Shinn, P.; Southwick, A.M.; Sun, H.; Tallon, A;Authors: Salzberg, S.L.; Schwartz, J.R.; Shinn, P.; Southwick, A.M.; Sun, H.; Tallon, A;Reference and analysis of chromosome 1 of the plant Arabidopsis.
A;Reference number: A86141; MuID:21016719; PMID:11130712

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0; Gaps

4; Indels

DB 2; Length 497; 85;

Score 34; DB Pred. No. 85; 0; Mismatches

68.0%; 55.6%;

Query Match
Best Local Similarity 55.6
Matches 5; Conservative

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Copyright (c) 1993 - 2004 Compugen Ltd.
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Result No.

Q9Y5j1 homo sapien P36731 human papil P06617 pseudomonas P63154 saccharomyc G64320 homo sapien O08599 mus musculu P33937 escherichia P39185 alcaligenes Q56350 paracoccus Q56350 synedobacter P37278 synedococc	P8753 canine acen O70546 mus musculu P39524 saccharomyc O87056 mus musculu P09848 homo sapien P16154 clostridium Q42688 chlomydomon Q10633 mycobacteri P59972 mycobacteri P59974 mus musculu P35441 mus musculu P35442 komo sapien P35448 senopus lae P35444 senopus lae	978742 schizopbyll Q46582 desulforibr P54566 bacillus su P56844 human papil P76062 escherichia Q10548 mycobacteri Q96676 canine aden Q17vrd2 candidatus Q65941 candidatus Q65941 canine aden P10128 mycoplasma Q99416 pyrococcus	P20037 rattus norv P20037 rattus norv Q9nxel homo sapien Q80032 mus musculu Q00322 mus musculu Q03484 rattus norv Q8ydc8 brucella me Q8Y070 brucella su P49716 homo sapien Q89wk2 bradyrhizob P88210 rhizoblum l C06704 bordetella Q8cwm3 synechococc Q8ym16 vibrio chol	Q87te5 vibrio para P48431 homo sapien P48432 homo sapien P54231 ovis aries Q9bxi3 homo sapien Q9bxi3 homo sapien Q9ut51 schizosacch P22712 homo sapien Q89by pseudomonas Q09275 caenorhabdi Q09275 caenorhabdi Q09371 caenorhabdi Q4235 gallus gall Q9de6 coturnix co Q9kr70 vibrio chol P31785 homo sapien P27458 achromobas Q8p108 xanthomonas Q8p331 xanthomonas
CG49 HUMAN VL1 HEV03 TR2M PSESS GUP1 YEAST STB1 HUMAN STB1 HUMAN STB1 ACCU NAPA ACCU NAPA ACCU NAPA RHOSH NAPA RHOSH	DPOL ADBECT DTX MOUSE ATG_ YEAST ATG_ YEAST LAG3 MOUSE LPH HUMAN TOXA CLODI GN1 CHLRE YD20 MYCTU YD54_MYCBO TSP1_HUMAN TSP2_HUMAN TSP2_HUMAN TSP2_HUMAN TSP2_HUMAN TSP2_HUMAN TSP2_THTCK	BB11_SCHCO BSVD_DSSVH SVDC_BACSU VXEE_BACSU VXL_BP064 RACR_ECOLI S1A_DESCR STAA_DECR YEAB_SCHPO RNH2_CANBF Z1A_ADECC RSS_WYCCA RSS_WYCCA RSS_WYCCA RSS_WYCCA RSS_WYCCA RSS_WYCCA	HA2B RAT MAZE TAIL MAZE THWAN CAH_MONDO PSB4_HUMAN CEBD MOUSE CEBD RAT DAPB_RRUGU DAPB_RRUGU DAPB_RRUGU DAPB_RRUGU DAPB_RRAJA DAPB_RRAJA TRUE_SYNEL TRUE_SYNEL Y 186 MYCPN	REN TIBPA SOX2 HUMAN SOX2 HUMAN SOX2 HUMAN CN3 SCHEP CN3 SCHPO MPB1 HUMAN CAHE HUMAN HEMZ PSEPK YCGG CAREL KERA CHICK KERA COTJA YH73 VIBCH CYGGHUMAN PRLB ACHLY MNT3 CANAL TRMU ZANAC
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Ogubcs homo sapien Q20745 caenorhabdi D9760 rathus norv	Q61645 mus musculu Q43593 homo sanien	Q63191 rattus norv	002401 rattus norv	PUSSYU drosophila Q61982 mus musculu	Q9r172 rattus norv	P18177 clostridium	Q12923 NOWO Bapien Q92313 mus musculu	043103 ustilago ma	Q9vw71 drosophila	Q9ceOl lactococcus	026324 carcinus ma	Plysos simian immu PO0673 balaenopter	Q8xyll ralstonia s	P47851 ovis aries	O927r4 chlamydia p	Qyprse gailus gall P24393 rattus norv	P07492 homo sapien	P50815 human papil P29007 bombina ori	P30661 pseudorable	Q1248/ Baccharomyc P30030 human rotav	P30031 human rotav P30032 human rotav	P04512 simian 11 r	Q8zrw3 salmonella	Q9jve7 neisseria m O9kod9 neisseria m	O98dz2 rhizobium l	P12952 DOMDYX MOII P12355 spinacia ol	P46486 flaveria tr P13192 hordenm vnil	Osvf89 drosophila	P07158 drosophila	P25139 drosophila P58307 mus musculu	mus	, μ,			Q10591 mycobacteri O66148 plectonema	synecho	Ognyze homo sapien Ogdz03 mus musculu	homo sa	Q9jn82 streptomyce	Q8k914 buchnera ap	P75691 escherichia P08282 pisum sativ	enu L	P55705 rhizobium s	2 2 2 3
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53 28 56.0 379 1 CYRG BOVIN 095118 bos taurus   154 28 56.0 379 1 SGAN_METEX P55819 methylobact	28 56.0 379 1 TRWG_XYLFT Q87dm0 28 56.0 389 1 GDD2 ZYGDO Q9bcvl	28 56.0 391 I GPD1_YEAST	28 56.0 397 1 LEFT MOUSE P27782	28 56.0 397 1 LEFT KAT QUQXATA 28 56.0 399 1 LEFT HUMAN QUUJU2	28 56.0 401 1 GPDI_ZYGRO Q9hgy2 28 56.0 406 1 aCVI_PTG P13	28 56.0 408 1 ACYI HUMAN Q03154	28 56.0 431 1 KRE2 CANAL 000310	28 56.0 432 1 GLN2_DAUCA 022506	28 56.0 440 1 GPD2 YEAST P41911	28 56.0 442 1 KREZ YEAST P27809	28 56.0 468 1 SP5R BACSU P37875	28 56.0 4/8 1 GATA_MICEN P/5534	28 56.0 494 1 ALG8 PSEAE Q52463	28 56.0 500 1 NU4C MAIZE P11647	28 56.0 501 1 S3A3_HUMAN Q12874	28 56.0 501 1 VL1 PAPVE 28 56.0 501 1 VL1 PAPVE	28 56.0 503 1 IRF7 HUMAN Q92985	28 56.0 503 1 VII_COPV Q89828 28 56.0 507 1 VII_HPV63 007861	28 56.0 510 1 YCGB ECOLI P29013	28 56.0 511 1 CTAQ_THEAQ P42663 28 56.0 514 1 ABF2 BACOV Q59219	28 56.0 516 1 YLJ7 YEAST P40492 28 56.0 521 1 YC90 MYCTU 010616	28 56.0 535 1 YD19_MYCTU Q10632	28 56.0 550 1 SUAL HUMAN F35610 28 56.0 552 1 ARRA_ARATH 049397	28 56.0 555 1 SYK METKA Q8twp6 28 56.0 593 1 Y40A RHISN P55586	28 56.0 610 1 GLMS_THIFE Q56275	28 56.0 611 1 YF51_SCHPO 014127 28 56.0 628 1 DYII_MOUSE 088485	28 56.0 630 1 Y4BJ_RHISN P55377	28 56.0 645 1 DYIL HUMAN 014576	28 56.0 663 1 CIRA_ECOLI P17315	28 56.0 663 1 Y4WM_RHISN P55691 28 56.0 684 1 LIPE_AERHY P40600	28 56.0 705 1 TRFE_CHICK P02789	28 56.0 752 1 HEPA_HSV2H P89431	28 56.0 757 1 DHET_GLUOX 005542	28 56.0 779 1 POOF PSESM Q8879	28 56.0 795 1 SYFB_YERPE Q8zdx1 28 56.0 820 1 CHIA_ALTSO P32823	28 56.0 829 1 CADG HUMAN 075309	28 56.0 829 1 CADG_RABIT Q28634	28 56.0 877 1 MGR3_HUMAN Q14832	28 56.0 879 1 MGR3_MOUSE Q94y82	28 56.0 886 1 SNXE_HUMAN Q995w7	28 56.0 942 1 KDCT_HUMAN P52824	28. 56.0 967 1 SYL_PYRHO 058698	28 56.0 1002 1 TAGA VIBCH P24019	28 56.U 1030 1 YO/5_MXCPN F/5556

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                                                                                                                                                          PRIN: JC7393; JC7393.

GO; GO:0005576; C:extracellular; ISS.

GO; GO:0005183; F:luteinizing hormone-releasing factor activity; ISS.

GO; GO:0007275; P:development; ISS.

InterPro; IPR002012; GnRH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -! SUBCELDUATION: Secreted.
-! SUBCELLUAR LOCATION: Secreted.
-! TISSUE SPECIFICITY: Expressed in the cell bodies of a cluster of neurons in the preoptic region.
-!- MISCELLANGOUS: Teleost species possess three paralogous GnEHs:
mdGnRH and cGnRH-II have been identified in tetrapods; sGRH has
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         residues; Hormone; Amidation; Signal;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Okubo K., Amano M., Yoshiura Y., Suetake H., Aida K.; "A novel form of gonadotropin-releasing hormone in the medaka, Oryzias latipes."; Biochem. Biophys. Res. Commun. 276:298-303(2000).
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GNRH-ASSOCIATED PEPTIDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Diterpro; IPRUGAGE, GRRH; 1.
PROSITE; PS00473; GRRH; 1.
PROSITE; PS00473; GRRH; 1.
Cleavage on pair of basic residues; Hormone; Amide Cleavage on pair of basic residues; Hormone; Amide Multigene family; Pyrrolidone carboxylic acid.

PROSONADOLIBERIN I.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE=20462954; PubMed=11006121;
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EHWSXGXXPG 10
                            :||| | || QHWSHGLSPG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NCBI_TaxID=8090;
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                                                                                                                                                                                                                                                                           Gaps
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Labroidei;
Cichlidae; Astatotilapia.

NCBI_TaxID=8153;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
MEDLINE-95396797; PubMed-7667296;
White S.A., Kasten T.L., Bond C.T., Adelman J.P., Fernald R.D.;
White gonadotropin-releasing hormone genes in one organism suggest
novel roles for an ancient peptide.";
Proc. Natl. Acad. Sci. U.S.A. 92:8363-8367(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -!- SUBCELLULAR LOCATION: Secreted.
-!- TISSUB SPECIFICITY: SYNTHESIZED IN PREOPTIC NEURONS AND IS
TRANSPORTED TO THE PITUITARY IN THE PREOPTIC-HYPOPHYSEAL AXONS.
-!- MASS SPECIFOMETRY: M#=1113.9; METHOD=MALDI; RANGE=23-32.
-!- SIMILARITY: Belongs to the GRRH family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A. MEDLINE-99061842; PubMed=9843638; MEDLINE-99061842; PubMed=9843638; White R.B., Fernald R.D.; Mite R.B., Fernald R.D.; "Obtogeny of gonadotropin-releasing hormone (GnRH) gene expression reveals a distinct origin for GnRH-containing neurons in the
               SIMILARITY).
AMIDATION (G-32 PROVIDE AMIDE GROUP)
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Powell J.F.F., Fischer W.H., Park M., Craig A.G., Rivier J.E.
White S.A., Francis R.C., Fernald R.D., Licht P., Warby C.,
Sherwood N.M.;
PYRROLIDONE CARBOXYLIC ACID (BY
                                                      P -> L (IN REF. 2; BAC06421)
T -> A (IN REF. 2; BAC06421)
A00F2BED6FD6E0B5 CRC64;
                                                                                                                 Score 42; DB 1; Length 91; Pred. No. 0.16;
                                                                                                                                                3; Indels
                                                                                                                                                1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         midbrain.";
Gen. Comp. Endocrinol. 112:322-329(1998).
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TISSUE-Pituitary;
                                           SIMILARITY)
                                                       8 P
54 T
10307 MW;
                                                                                                                  84.0%;
                                                                                                                                                6; Conservative
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91 AA;
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modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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J. Mol. Endocrinol. 21:277-289(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16-OCT-2001 (Rel. 40, Last sequence update)
28-FRBE-2003 (Rel. 41, Last annotation update)
Gonadoliberin I precursor (Gonadotropin-releasing hormone I) (GnRH-I)
(LH-RH I) (Luliberin I).
                                                                                                                                                                                                                                                               PRINTS; PRO1541; GONADOLIBRNI.
PROSITE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus;
                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Actinopterygii, Neopterygii, Teleostei, Buteleostei, Neoteleostei,
Acanthomorpha, Acanthopterygii, Percomorpha, Perciformes, Percoidei,
Moronidae, Morone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 AMIDATION (G-33 PROVIDE AMIDE GROUP).
ENGHRIFKK -> KMDIGHSRNERFL (IN REF. 1)
                                                                                                                                                                                                                                                                                                                                                                                       GONADOLIBERIN I.
GNRH-ASSOCIATED PEPTIDE I (POTENTIAL).
PYRROLIDONE CARBOXYLIC ACID.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 42; DB 1; Length 94; Pred. No. 0.17; 3; Indels 1; Mismatches
                                                                                                                                                                                                                                                                                                                            Signal, Multigene family, Pyrrolidone carboxylic acid SIGNAL _{1}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           E57DBA83333278D7 CRC64;
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InterPro; IPR002012; GnRH.
InterPro; IPR004079; GonadoliberinI.
Pfam; PF00446; GnRH.
PRINTS; PR01541; GONADOLIBRNI.
PROSITE; PS00473; GNRH; I.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus; Signal; Multigene family; Pyrrolidone carboxylic acid.
SiGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRINTS; PRO1541; GONADOLIBRNI.
PROSITE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus;
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28-FEB-2003 (Rel. 41, Last annotation update)
Gonadoliberin I precursor (Gonadotropin-releasing hormone I) (GnRH-I) (LH-RH I) (Luliberin I).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pagrus major (Red sea bream) (Chrysophrys major).
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleosten;
Actinopterygli, Neopterygli, Teleosten; Buteleosten; Neoreleosten;
Acanthomorpha; Acanthopterygli; Percomorpha; Perciformes; Percoidei;
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GNRH-ASSOCIATED PEPTIDE I (POTENTIAL).
PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Okuzawa K., Granneman J., Bogerd J., Goos H., Zohar Y., Kagawa H., Submitted (SEP-1996) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: Stimulates the secretion of gonadotropins (By
                                                                                                                                                                                         PROGONADOLIBERIN I.
GONADOLIBERIN I.
GNRH-ASSOCIATED PEPTIDE I (POTENTIAL)
                                                                                                                                                                                                                                                                                                    AMIDATION (G-33 PROVIDE AMIDE GROUP)
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                                                                                                                                                                                                                                                             PYRROLIDONE CARBOXYLIC ACID (BY
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Pred. No. 0.17;
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                                                                                                                                                                                                                                                                                                                                                    980C6988FC279BFC CRC64;
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PROGONADOLIBERIN I.
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-!- SUBCELLULAR LOCATION: Secreted.
-!- SIMILARITY: Belongs to the GnRH family.
                                                                                                                                                                                                                                                                                                                                                                                                                                             1; Mismatches
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Interbro; IPR002012; GnRH.
Interbro; IPR004079; GonadoliberinI.
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PEPTIDE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PEPTIDE
PEPTIDE
MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GON1 PAC
P70074;
                                                                                                                                                                                                                                                             MOD_RES
                                                                                                                                                                                                                                                                                                           MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 5
GON1 PAGMA
                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
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1 EHWSXGXXPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Moronidae;
MOD RES
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE
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MOD_RES
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HAIN
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Matches
                                                                                                                                                                                                                                                           RESULT 7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the BYBL outstation the Buropean Bioinformatics institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                 01-0CT-1996 (Rel. 34, Created)
01-0CT-1996 (Rel. 34, Last sequence update)
28-FRB-2003 (Rel. 41, Last annocation update)
Gonadoliberin I precursor (Gonadotropin-releasing hormone I) (GnRH-I)
(LH-RH I) (Luliberin I) (SBGRRH).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRINTS; PRO1541; GONADOLIBRNI.
PROSITE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus;
                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Būkaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Actinopterygii; Neopterygii; Teleostei; Buteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Percoidei;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GONADOLIBERIN I.
GNRH-ASSOCIATED PEPTIDE I (POTENTIAL).
PYRROLIDONE CARBOXYLIC ACID.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE=95083645; PubMed=7991588; Park M., Fischer W.H., Powell J.F.F., Zohar Y., Elizur A., Park M., Fischer W.H., Caraig A.G., Rivier J.E., Lovejoy D.A., Sherwood N.M.; Three forms of gonadotropin-releasing hormone characterized from brains of one species.'
Proc. Natl. Acad. Sci. U.S.A. 91:12081-12085 (1994).
Proc. Natl. Acad. Sci. U.S.A. 91:12081-12085 (1994).
-! FUNCTION: Stimulates the secretion of gonadotropins.
-! STUBCELLUIAR LOCATION: Secreted.
-! STUBCELLUIAR LOCATION: Geneted.
-! SIMILARITY: Belongs to the GERH family.
                      (G-34 PROVIDE AMIDE GROUP)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDILINE=55268499; PubMed=7749463;

Gothilf Y., Elizur A., Chow M., Chen T.T., Zohar Y.;

"Molecular cloning and characterization of a novel gonadotropin-

releasing hormone from the gilthead seabream (Sparus aurata).";

Mol. Mar. Biol. Biotechnol. 4:27-35(1995).
                                                                                                                                                    .
0
                                                                                                      Length 95;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Signal; Multigene family; Pyrrolidone carboxylic acid.
SIGNAL
                      AMIDATION (G-34 PROVIDE )
(BY SIMILARITY).
61E79C990328D73E CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PROGONADOLIBERIN I.
                                                                                                    Score 42; DB 1;
Pred. No. 0.17;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                             95 A.A.
  SIMILARITY)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL; U30320; AAA75469.1; -.
III.terPro; IPR002012; GnRH.
III.terPro; IPR004079; Gonadoliberini.
Pfam; PF00446; GnRH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sparus aurata (Gilthead sea bream)
                                                               10566 MW;
                                                                                                        84.0%;
                                                                                                                             60.0%;
                                                                                                                                                  6; Conservative
                                                                                                                                                                                                                                                                                                                                             STANDARD;
                                                                                                                                                                                           1 EHWSXGXXPG 10
                                                                                                                                                                                                                    :||| | ||
24 QHWSYGLSPG 33
                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE OF 26-35.
                                                             95 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sparidae; Sparus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NCBI_TaxID=8175;
                      33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  236 P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TISSUE-Brain;
                                                                                                                                                                                                                                                                                                                                          GONI SPAAU
P51919;
                                                               SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PEPTIDE
PEPTIDE
MOD RES
                         MOD_RES
                                                                                                                                                                                                                                                                                                    RESULT 6

GON1 SPAND

GON1 SPAND

GON1 SPAND

DT 01-0CT

DT 01-0CT

DT 01-0CT

DT 01-0CT

GN GNRH1.

GN GON1 DT 02.

Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acting Occ Acti
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; AF224279; AAF62898.1; -.
InterPro; IPR002012; GnBH.
InterPro; IPR004079; GonadoliberinI.
PFEM; PR00446; GnRH; 1.
PRINTS; PR01541; GONADOLIBRNI.
PROSTTE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus; Signal; Multigene family; Pyrrolidone carboxylic acid.
1 26
POTENTIAL.
                                                                                                                                                                                                                                                                                                                                          16-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 40, Last sequence update)
28-FRB-2003 (Rel. 41, Last annotation update)
Gonadoliberin I precursor (Gonadotropin-releasing hormone I) (GnRH-I)
(LH-RH I) (Luliberin I).
                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Dicentrarchus labrax (Buropean sea bass).
Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Actinopterygii; Neopterygii; Teleostei; Buteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Percoidei;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GNRH-ASSOCIATED PEPTIDE I (POTENTIAL)
PYRROLIDONE CARBOXYLIC ACID (BY
SIMILARITY).
AMIDATION (G-36 PROVIDE AMIDE GROUP). 49313FD6FD6B87DA CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AMIDATION (G-37 PROVIDE AMIDE GROUP)
(BY SIMILARITY).
ECBAEEC93CC02904 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 42; DB 1; Length 99;
Pred. No. 0.18;
1; Mismatches 3; Indels
                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PROGONADOLIBERIN I. GONADOLIBERIN I.
                                                               Score 42; DB 1;
Pred. No. 0.17;
1; Mismatches
                                                                                                                                                                                                                                                                                                        99 AA.
    35 35
95 AA; 10753 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10758 MW;
                                                                    84.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             84.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Dicentrarchus.
                                                                                      Local Similarity 60.0
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                                                                                                                                                      1 EHWSXGXXPG 10
                                                                                                                                                                                             26 OHWSYGLSPG 35
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les 6; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NCBI TaxID=13489;
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240
240
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                                                                                                                                                                                             9374; P20407;
01-FEB-1991 (Rel. 17, Created)
01-FEB-1991 (Rel. 17, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Gonadoliberin I (Gonadotropin-releasing hormone I) (GnRH-I) (LH-RH I)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE=91352338; PubMed=1882082;
Lovejoy D.A., Fischer W.H., Parker D.B., McRory J.E., Park M.,
Lance V., Swanson P., Rivier J.E., Sherwood N.M.;
"Primary structure of two forms of gonadotropin-releasing hormone
from brains of the American alligator (Alligator mississippiensis).";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15-DEC-1998 (Rel. 37, Created)
15-DEC-1998 (Rel. 37, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
28-FEB-2010 heart annotation update)
Contains: Gonadoliberin I (LH-RH I)
(Luteinizing hormone-releasing hormone I) (Gonadotropin-releasing hormone I) (GnRH I) (Luliberin I); GnRH-associated peptide I)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ovis aries (Sheep).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
Mammalia, Eutheria, Cetartiodactyla, Ruminantia, Pecora, Bovoidea,
                                                                                                                                                                                                                                                                                                                                                                             Alligator mississippiensis (American alligator).
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Archosauria; Crocodylidae; Alligatorinae; Alligator.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE OF 1-10.
MEDLINE=72094314; PubMed=4550508;
Burgus R., Butcher M., Amoss M., Ling N., Monahan M., Rivier J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .;
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INF, AGOOGE, RHAQI...

InterPro; IPRO02012; GRH.

PEAM; PF00446; GRRH; 1.

PROSITE; PS00473; GNRH; 1.

HORMONE; Amidation; Hypothalamus; Pyrrolidone carboxylic promone; Pyrrolidone Carboxy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 41; DB 1; Length 10;
Pred. No. 0.028;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Regul. Pept. 33:105-116(1991).
-!- FUNCTION: Stimulates the secretion of gonadotropins.
-!- SUBCELLULAR LOCATION: Secreted.
-!- SIMILARITY: Belongs to the GnRH family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE OF 12-61 FROM N.A.
STRAIN=Western range; TISSUE=Hypothalamus;
Rodriguez R.E., Wise M.E.;
Submitted (OCT-1993) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AMIDATION.
284B23D7286B45A3 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 AA.
                                                                                                                                                                             10 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                             PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  82.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10 AA; 1172 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bovidae, Caprinae, Ovis.
                                                                                                                                                                             STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 EHWSXGXXPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 OHWSYGLOPG 10
:||| | || QHWSYGLSPG 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GNRHI OR GNRH OR LHRH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
es 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NCBI TaxID=9940;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID=8496;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TISSUE=Brain;
                                                                                                                                                                                                                                                                                                                                                          (Luliberin I)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GON1 SHEEP
Q28588;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (Fragment)
                                                                                                                                                                             GON1 ALLMI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOD RES
SEQUENCE
                               27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
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AC QONI_S
AC QONI_S
AC QONI_S
DT 15-DEC
DT 15-DEC
DT 28-FEB
DE (Lutei)
DE (Fragm
GN GNRH1
OS OVIS AC
OC BURALY
OC BURALY
OC BOVIE
CO MAMMANIA
OC BOVIE
CO MAMMANIA
CO ROBE
CO MAMMANIA
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-! FUNCTION: Stimulates the secretion of gonadotropins; it stimulates the secretion of forb luteinizing and follicle-stimulating
Pellows R., Blackwell R., Vale W., Guillemin R.;
"Primary structure of the ovine hypothalamic luteinizing hormone-
releasing factor (LAF) (LH-hypothalamus-LAF-gas chromatography-mass
spectrometry-decapeptide-Edman degradation).";
Proc. Natl. Acad. Sci. U. S.A. 69:278-282(1972).
-!- FONCTION: Stimulates the secretion of gonadotropins; it stimulates
the secretion of both luteinizing and follicle-stimulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRINTS; PRO1541; GONADOLIBRNI.
PROSITE; PRO1641; GONADOLIBRNI.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus;
Placenta; Pyrrolidone carboxylic acid.
OND TER 1 1 1 PROGONADOLIBERIN I.
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APPEARS TO BE ESSENTIAL FOR BIOLOGICAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GROUP).
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15-DEC-1998 (Rel. 37, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Progonadoliberin I precureor [Contains: Gonadoliberin I (LH-RH I)
[Luteinizing hormone-releasing hormone I) (Gonadotropin-releasing hormone I) (GnRH I) (Luliberin I); GnRH-associated peptide I]
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Mammalia, Butheria, Rodentia, Sciurognathi, Muridae, Cricetinae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
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AMIDATION (G-11 PROVIDE AMIDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 1; Length 61;
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GNRH-ASSOCIATED PEPTIDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     63962A1AE319B8F0 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 41; DB 1
Pred. No. 0.17;
1; Mismatches
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-!- SUBCELLULAR LOCATION: Secreted.
-!- SIMILARITY: Belongs to the GARH family.
                                                                                                                                                                                                                                             -!- SIMILARITY: Belongs to the GnRH family.
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InterPro, IPR004079; GonadoliberinI.
Pfam; PF00446; GnRH; 1.
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                                                                                                                                                                                                                      -! - SUBCELLULAR LOCATION: Secreted.
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60.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; U02517; AAA03433.1;
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ID GON1 MESA
AC 009163;
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us-09-857-115-7.rsp

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Query Match
Best Local S
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GON1 CLAGA
ID GON1 CLA(A)
AC P33439;
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                This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                   EMBL, U99388, AAB51302.1;
InterPro; IPR004012; GnRH.
InterPro; IPR0040079; GonadoliberinI.
Pfam; PF00446; GnRH; 1.
PRINTS; PR01541; GONADOLIBRNI.
PROSITE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus;
Placenta; Pyrrolidone carboxylic acid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AMIDATION (G-11 PROVIDE AMIDE GROUP) (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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MEDLINE=95124501; PubMed=7545971;
MEDLINE=95124501; PubMed=7545971;
MEDVINE=95124501; PubMed=7545971;
"Developmental expression of the genes encoding transforming growth factor alpha and its receptor in the hypothalamus of female rhesus
                                                                                                                                                                                                                                                                                                                                                                                                                            APPEARS TO BE ESSENTIAL FOR BIOLOGICAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-OCT-1996 (Rel. 34, Created)
01-OCT-1996 (Rel. 34, Last sequence update)
01-OCT-1996 (Rel. 41, Last annotation update)
Progonadoliberin I precursor [Contains: Gonadoliberin I (LH-RH I)
(Luteinizing hormone-releasing hormone I) (Gonadotropin-releasing hormone I) (GnRH I) (Luliberin I); GnRH-associated peptide I]
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follicle-stimulating
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PYRROLIDONE CARBOXYLIC ACID (BY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 41; DB 1; Length 63;
Pred. No. 0.18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3; Indels
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                                                                                                                                                                                                                                                                                                                                                  PROGONADOLIBERIN I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   67 AA.
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-!- SIMILARITY: Belongs to the GnRH family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                    GONADOLIBERIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Neuroendocrinology 60:346-359(1994).
-!- FUNCTION: Stimulates the secretion of the secretion of both luteinizing and
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7370 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      82.0%;
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             63
63 AA;
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GNRH1 OR G
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GON1_MACMU
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  SO THE PETET                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
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between the Swiss Institute of Bioinformatics and the EMBL outstation -
the Buropean Bioinformatics Institute. There are no restrictions on its
use by non-profit institutions as long as its content is in no way
modified and this statement is not removed. Usage by and for commercial
entities requires a license agreement (See http://www.isb-sib.ch/announce/
or send an email to license@lsb-sib.ch).
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                                                                                                                                                                               EMBL; S75918; AAB33096.1; -.

PIR; I78541; I78541.

InterPro; IPRO02012; GRRH.

InterPro; IPRO04079; GonadoliberinI.

PRINTS; PRO1446; GRRH; 1.

PRINTS; PRO1441; GONADOLIBRNI.

PROSTE; PRO0473; GNRH; 1.

Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus; Signal; Pyrrolidone arboxylic acid.

SIGNAL . S SIMILARITY.
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01-ROV-1995 (Rel. 32, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Gonadoliberin I precursor (Gonadotropin-releasing hormone I) (GnRH-I)
(LH-RH) (Luliberin I).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GONADOLIBERIN I.
GNRH-ASSOCIATED PEPTIDE I.
APPEARS TO BE ESSENTIAL FOR BIOLOGICAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Clarias gariepinus (Sharptooth catfish) (African catfish).
Eukaryota; Merazoa; Chordata; Craniata; Verrebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Siluriformes;
Clariidae; Clarias.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (Clarias
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bogerd J., Zandbergen T., Andersson E., Goos H.;
"Isolation, characterization and expression of cDNAs encoding th
catfish-type and chicken-II-type gonadotropin-releasing-hormone
precursors in the African catfish.";
Bur. J. Biochem. 222:541-549(1994).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACTIVITY (BY SIMILARITY).
PYRROLIDONE CARBOXYLIC ACID (BY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 41, DB 1; Length 67;
Pred. No. 0.19;
1; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                BY SIMILARITY.
PROGONADOLIBERIN I.
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MEDLINE=94291651; PubMed=8020492;
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MEDLINE=92392313; PubMed=1520292;
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60.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              7573 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            67 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=13013;
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us-09-857-115-7.rsp

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PIR; 151423; 151423.
                                                                                                                                                                              PEPTIDE
MOD_RES
MOD_RES
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                               RESULT 14
GON1 MOUSE
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                          between the Swiss Institute of Bioinformatics and the EMBL outstation the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                             PROSITE; PF00446; GRRH; 1.
PROSITE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus; Signal; Pyrrolidone carboxylic acid.
SIGNAL 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-NOV-1995 (Rel. 32, Created)
01-NOV-1995 (Rel. 32, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Gonadoliberin 1,
(LH-RH) (Luliberin 1).
Xenopus laevis (African clawed frog).
                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                             PYRROLIDONE CARBOXYLIC ACID.
AMIDATION (G-32 PROVIDE AMIDE GROUP).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Amphibia, Batrachia, Amura, Mesobatrachia, Pipoidea, Pipidae,
                                                                                                                                                                                                                                                                                                                                                                                                            .
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TISSUE=Forebrain, MEDLINE=94185563; PubMed=8137750; Hayes W.P., Wray S., Battey J.F.; Hayes W.P., Wray S., Battey J.F.; Influe gonadotropin-releasing hormone-I (GnRH-I) gene has mammalian-like expression pattern and conserved domains in GnRH-associated peptide, but brain onset is delayed until
                                                                                                                                                                                                                                                                                                                                                                              Score 41; DB 1; Length 80;
Pred. No. 0.22;
1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                  GONADOLIBERIN I.
GNRH-ASSOCIATED PEPTIDE I.
                                                                                                                                                                                                                                                                                                                                                   OBESEEDF4FF861A CRC64;
                                                                                                                                                                                                                                                      PROGONADOLIBERIN I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       89 AA
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                                                                                                                          EMBL; X78048; CAA54970.1; -. SEMBL; X78049; CAA54971.1; -. PIR, $45602; RHIDIS. InterPro; IPR002012; GRRH.
                                                                                                                                                                                                                                                                                                                                                                               82.0%;
                                                                                                                                                                                                                                                                                                                                                                                              60.08;
                                                                                                                                                                                                                                                                                                                                                   8893 MW;
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                                                                                                                                                                                                                                                                                                                                                                                           Similarity 60.(6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STANDARD;
                                                                                                                                                                                                                                                      80
31
31
44
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                QHWSHGLNPG 31
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=8355;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          metamorphosis.";
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Best Local S
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SEQUENCE
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PEPTIDE
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MOD_RES
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-!- SUBCELLULAR LOCATION: Secreted.
-!- SIMILARITY: Belongs to the GRRH family.
-!- SIMILARITY: Belongs to the GRRH family.

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MEDILINE=87069328; PubMed=3024317;
MEDILINE=87069328; PubMed=3024317;
MASON A.J., Hayflick J.S., Zoeller R.T., Young W.S. III,
Phillips H.S., Nikolics K., Seeburg P.H.;
"A deletion truncating the gonadotropin-releasing hormone gene is
responsible for hypogonadism in the hpg mouse.";
Science 234:1366-1371(1986).
-!- FUNCTION: Stimulates the secretion of gonadotropins; it stimulates
the secretion of both luteinizing and follicle-stimulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-JAN-1990 (Rel. 13, Created)
01-JAN-1990 (Rel. 13, Last sequence update)
28-FBB-2003 (Rel. 41, Last annotation update)
Progonadoliberin I precursor [Contains: Gonadoliberin I (LH-RH I)
[Luteinizing hormone-releasing hormone I) (Gonadotropin-releasing hormone I) (Gonadotropin-releasing hormone I) (GNRH I) (Luliberin I); Prolactin release-inhibiting factor
                                                                                                                                                                                                                                                                                                                               GONADOLIBERIN I.
GONADOTROPIN-RELEASING HORMONE ASSOCIATED
                                                                                                                                                                                    Hormone; Amidation; Hypothalamus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
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Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae; Mus.
NOBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                             GNRH-ASSOCIATED PEPTIDE I (GAP).
PYRKOLIDONE CARROXYLIC ACID.
AMIDATION (G-34 PROVIDE AMIDE GROUP)
6F4F36FBAE0D4284 CRC64;
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Pred. No. 0.25;
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                                                                                                                                                                                                                                                                                         PROGONADOLIBERIN I.
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InterPro; IPR002012; GnRH.
InterPro; IPR04079; GonadoliberinI.
PERNYS; PR00446; GNRH; 1.
PRINTS; PR00446; GNRH; 1.
PROSITE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Hox Signal; Pyrrolidone carboxylic acid.
SIGNAL 24 89 GONADOLIBE PEPTIDE 24 GONADOLIPE PEPTIDE 24 GONADOLIPE PEPTIDE 37 89 GONADOLRO!
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MOD; MOI:95789; GATH.
INTERPO: IPR002012; GRH.
INTERPO: IPR004079; GonadoliberinI.
Pfan; PF00446; GRH.
PRINTS; PR01541; GONADOLIBRNI.
PROSITE; PS00473; GNRH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                      PEPTIDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT;
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PIR; A47578; RHMSG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 82.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 EHWSXGXXPG 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                             37
24
33
89 AA;
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P13562;
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hormone I)
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P49921;
                                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                                                                       Query Match
                                                  PEPTIDE
PEPTIDE
                                                                                                                            MOD_RES
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SIGNAL
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GON1 PIG
                            CHAIN
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  pair of basic residues; Hormone; Amidation; Hypothalamus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10-0CT-2003 (Rel. 42, Created)
10-0CT-2003 (Rel. 42, Last sequence update)
10-0CT-2003 (Rel. 42, Last amotation update)
10-0CT-2003 (Rel. 42, Last amotation update)
Progonadoliberin I precursor (Contains Gonadoliberin I (LHRH I)
Cluteinizing hormone releasing hormone I) (Gonadotropin releasing hormone I) (GnRH I) (Luliberin I); GnRH-associated peptide I (GAPI)].
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL; AF188754; AAL05972.1; -...
GO; GO:0005576; C:extracellula: NAS.
GO; GO:0005183; F:luteinizing hormone-releasing factor activity; NAS.
GO; GO:0009755; P:hormone mediated signaling; NAS.
GO; GO:000003; P:reproduction; NAS.
InterPro; IPR002012; GRAH
InterPro; IPR002012; GRAH
InterPro; IPR004079; GonadoliberinI.
                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "Cloning and characterization of cDNAs encoding the GnRH1 and GnRH2
                                                                                                                                 APPEARS TO BE ESSENTIAL FOR BIOLOGICAL
                                                                                                                                                                                                           PYRROLIDONE CARBOXYLIC ACID.
AMIDATION (G-32 PROVIDE AMIDE GROUP).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Rana catesbeiana (Bull frog).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Amphibia, Batrachia, Anura, Neobatrachia, Ranoidea, Ranidae, Rana.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -!- SUBCELLULAR LOCATION: Secreted.
-!- TISSUE SPECIFICITY: Forebrain.
-!- DEVELOPMENTAL STAGE: Expressed at significantly higher levels during post-breeding. Not expressed in pituitary.
-!- SIMILARITY: Belongs to the GRRH family.
                                                                                                           GONADOLIBERIN I.
PROLACTIN RELEASE-INHIBITING FACTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PROSITE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Signal;
Pyrrolidone carboxylic acid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A., TISSUE SPECIFICITY, AND DEVELOPMENTAL STAGE
                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TISSUE=Forebrain;
MEDLINE=21102951; PubMed=11170016;
MEDLINE=21102951; Kang H.M., Im W.B., Choi H.S., Bogerd J.,
Kwon H.B.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                precursors from bullfrog (Rana catesbeiana).";
J. Exp. Zool. 289:190-201(2001).
-!- FUNCTION: Stimulates the secretion of gonadotropins (By
                                                                                                                                                                                                                                                                                                                 Score 41; DB 1; Length 90;
Pred. No. 0.25;
1; Mismatches 3; Indels
                                                                                                                                                                                                                                                              1C0766FA4826E4D9 CRC64;
                                                                               PROGONADOLIBERIN I.
                            Signal, Pyrrolidone carboxylic acid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 90 AA
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                                                                                                                                                                                                                                                                                                                   82.0%;
60.0%;
                                                                                                                                                                                                                                                              10337 MW;
                                                                                                                                                                                                                                                                                                                                                                         Conservative
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                                                                            1 EHWSXGXXPG 10
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                                                                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                                                                                                                                 90 AA;
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228
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Q90Y63;
                            Placenta;
SIGNAL
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PEPTIDE
ACT_SITE
  Cleavage
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Baba Y., Arimura A., Schally A.V.;
"On the tryptophan residue in porcine LH and FSH-releasing hormone.";
Blochem. Biophys. Res. Commun. 45:483-487 (1971).
-!- FUNCTION: Stimulates the secretion of gonadotropins; it stimulates the secretion of both luteinizing and follicle-stimulating
                                                                                                                                                                                                     (BY
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Matsuo H., Arimura A., Nair R.M.G., Schally A.V.;
"Synthesis of the porcine LH- and FSH-releasing hormone by the solid-
                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                        AMIDATION (G-35 PROVIDE AMIDE GROUP)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-OCT-1996 (Rel. 34, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
29-FCB-2003 (Rel. 1)
29-FCB-2003 (Rel. 1)
20-FCB-2003 (Rel. 1)
20-FCB-2003 (Borenter (Contains: Gonadoliberin I (LH-RH I)
20-FCB-2003 (LH-RH I)
20-FCB-2003 (Rel. 1)
20-FCB
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"Structure of the porcine LH- and FSH-releasing hormone. II.
Confirmation of the proposed structure by conventional sequential
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Euteleostomi;
Sus.
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0
                                                                                                                                        PYRROLIDONE CARBOXYLIC ACID (BY
                                                                               -ASSOCIATED PEPTIDE I (BY
                                                                                                                                                                                                                                                                                                                           Length 90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Weesner G.D., Matteri R.L., Becker B.A.;
Submitted (MAY-1994) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                              317203B4E3DA2FE7 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sus scrofa (Pig).
Makaryota, Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Butheria; Cetartiodactyla; Shina; Suidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              iochem. Biophys. Res. Commun. 44:459-463(1971)
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                                                                                                                                                                                                                                                                                                                       Score 41; DB 1;
                         PROGONADOLIBERIN
                                                                                                                                                                                                                                                                                                                                                    Pred. No. 0.25;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            91 AA
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                                                  GONADOLIBERIN
                                                                                                                                                                                                                              SIMILARITY)
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                                                                                                                  SIMILARITY
POTENTIAL
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MEDLINE=72114303; PubMed=4946067;
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01-0CT-1996 (Rel. 34, Last seq
28-FEB-2003 (Rel. 41, Last ann
                                                                                                                                                                                                                                                                 10291 MW;
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                                                                                                                                                                                                                                                                                                                                                                                    6; Conservative
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                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                 90 AA;
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hormone gene.";
Nucleic Acids Res. 17:6403-6403 (1989)
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Best Local Similarity 60.vv,
Best Local Similarity - ...
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SEQUENCE FROM N.A.
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92 AA;
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P01148;
21-JUL-1986 (
01-APR-1988 (
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MOD RES
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GON1_HUMAN
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Gallus gallus (Chicken).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                         EMBL; L32864; AAA31066.1; -.
InterPro; IPR002012; GnRH.
InterPro; IPR004079; GnaddliberinI.
Prem; PR00446; GnRH; 1.
PRINTS; PR01541; GONADOLIBRNI.
PROSITE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus; SIGNAL
1 23
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King J.A., Millar R.P.;
King J.A., Millar R.P.;
"Structure of avian hypothalamic gonadotrophin-releasing hormone.";
S. Afr. J. Sci. 78:124-125(1982).
                                                                                                                                                                                                                                                                                                                                                                                  GONADOLIBERIN I.
GNRH-ASSOCIATED PEPTIDE I.
APPEARS TO BE ESSENTIAL FOR BIOLOGICAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AMIDATION (G-34 PROVIDE AMIDE GROUP). 8340474F32DDAA99 CRC64;
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31042; P20407;
01-FBE-1991 (Rel. 17, Created)
01-JUN-1994 (Rel. 29, Last sequence update)
28-FBE-2003 (Rel. 41, Last annotation update)
Progonadoliberin I precursor [Contains: Gonadoliberin I (LH-RH I) (Luteinizing hormone-releasing hormone I) (Gonadotropin-releasing hormone I) (Gonadotropin-relea
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TISSUE=Hypothalamus;
MEDINE=2255778; Pubmed=7050119;
King J.A., Millar R.P.;
Structure of chicken hypothalamic luteinizing hormone-releasing hormone. II. Isolation and characterization.";
J. Sholl. Chem. 257:10729-10732(1982).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SYNTHESIS OF 24-33.
MEDLINE-82265777; PubMed-7050118;
King J.A., Millar R.P.;
"Structure of chicken hypothalamic luteinizing hormone-releasing hormone. I. Structural determination on partially purified material.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRAIN=White leghorn;
MEDIINE=9405955; Pubmed=7902095;
Dubn I.C., Chen Y., Hook C., Sharp P.J., Sang H.M.;
"Characterization of the chicken preprogonadotrophin-releasing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 41; DB 1; Length 91;
Pred. No. 0.26;
1; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                    PROGONADOLIBERIN I.
   send an email to license@isb-sib.ch)
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Mol. Endocrinol. 11:19-29(1993)
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10090 MW;
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Best Local Similarity 60...
Best Local 6; Conservative
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24 QHWSYGLRPG 33
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ACT_SITE
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This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the BNBL outstation the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE-86094338; PubMed-2867548;
Adelman J.P., Mason A.J., Hayflick J.S., Seeburg P.H.;
"Isolation of the gene and hypothalamic cDNA for the common precursor
"Isolation of the gene and hypothalamic cDNA for the common precursor
of gonadotropin-releasing hormone and prolactin release-inhibiting
factor in human and rat.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRINTS; PR01541; GONADOLIBRNI.
PROSITE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus;
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PYRROLIDONE CARBOXVILIC ACID.
AMIDATION (G-34 PROVIDE AMIDE GROUP).
61AEB7EBAF508B6A CRC64;
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01-APR-1988 (Rel. 07, Last sequence update)
28-FRB-2003 (Rel. 41, Last annotation update)
27-Grandoliberin I precursor [Contains: Gonadoliberin I (LH-RH I)
[Luteinizing hormone-releasing hormone I) (Gonadotropin-releasing hormone I) (GARH I) (Luliberin I) (Gonadorelin); GARH-associated
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Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
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Pred. No. 0.26;
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PROGONADOLIBERIN I. GONADOLIBERIN I.
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Proc. Natl. Acad. Sci. U.S.A. 83:179-183(1986).
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                                                                                                             92 AA;
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                       MOD_RES
MOD_RES
VARIANT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gonadotropins; it stimulates follicle-stimulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Characterization of single-nucleotide polymorphisms in coding regions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus; Placenta; Pharmaceutical; Signal; Polymorphism; Pytrolidone carboxylic acid.

1 23 PROGONADOLIBERIN I. 24 92 RROGONADOLIBERIN I. PEPTIDE 24 33 GONADOLIBERIN I. PEPTIDE 37 92 GNRH-AASOCIAPED PEPTIDE I. ACT_SITE 26 26 APPEARS TO BE ESSENTIAL FOR BIOLOGICAL
                                                                                                                                                                                                                                                                                                                                                   MEDLINE=99318093; PubMed=10391209;
Cargill M., Altshuler D., Ireland J., Sklar P., Ardlie K., Patil N.,
Shaw N., Lane C.R., Lim B.P., Kalyanaraman N., Nemesh J., Ziaugra L.,
Friedland L., Rolfe A., Warrington J., Lipshutz R., Daley G.Q.,
Lander E.S.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MIM; 152760; -.
GO; GO:0005625; C:soluble fraction; TAS.
GO; GO:0005183; F:luteinizing hormone-releasing factor activity; TAS.
GO; GO:0007267; P:cell-cell signaling; TAS.
GO; GO:0007275; P:development; TAS.
GO; GO:0008285; P:negative regulation of cell proliferation; TAS.
GO; GO:0007165; P:signal transduction; TAS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SUBCELLULAR LOCATION: Secreted. PHARMACEUTICAL: Available under the names Factrel (Ayerst Labs), Lutrepulse or Lutrelef (Ferring Pharmaceuticals) and Relisorm
                                                               Seeburg P.H., Adelman J.P.; "Characterization of cDNA for precursor of human luteinizing hormone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cargill M., Altshuler D., Ireland J., Sklar P., Ardlie K., Patil N., Shaw N., Lane C.R., Lim E.P., Kalyanaraman N., Nemesh J., Ziaugra L. Friedland L., Rolfe A., Warrington J., Lipshutz R., Daley G.Q.,
                                                                                                                                                                                                                                              peptide
                                                                                                                                                                                                                       Tan L., Rousseau P., "The chemical identity of the immunoreactive LHRH-llke
                                                                                                                                                                                                                                                                 biosynthesized in the human placenta.";
Biochem. Biophys. Res. Commun. 109:1061-1071(1982).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FUNCTION: Stimulates the secretion of
the secretion of both luteinizing and
SEQUENCE FROM N.A., AND VARIANT SER-16.
MEDLINE-85012739, Pubmed=6090951;
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InterPro, IPR004079; GonadoliberinI
                                                                                                                                                                          SEQUENCE OF 24-33.
MEDLINE=83126573; PubMed=6760865;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pfam; PF00446; GnRH; 1.
PRINTS; PR01541; GONADOLIBRNI.
PROSITE; PS00473; GNRH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          human genes.";
.. Genet. 22:231-238(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Genet, 23:373-373(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL, X01059; CAA25526.1; -. EMBL; M12578; AAA35916.1; -. EMBL; X15215; CAA33285.1; -. PIR; S05308; RHHUG.
                                                                                                                                  Nature 311:666-668(1984)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HGNC:4419; GNRH1.
                                                                                                           releasing hormone.
                                                                                                                                                                                                                                                                                                               [5]
VARIANT SER-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      hormones.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Lander E.S.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Genew;
MIM; 15
    REAL THE SEARCH ```

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This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its
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28-FEB-2003 (Rel. 41, Last annotation update)
Prognadodliberin I precureor [Contains: Gonadoliberin I (LH-RH I)
[Luteinizing hormone-releasing hormone I) (Gonadotropin-releasing factor horm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Construct 235:1514-1517(1987).
-!- FUNCTION: Stimulates the secretion of gonadotropins; it stimulates the secretion of both luteinizing and follicle-stimulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE-86094338; PubMed=2867548; Adelman J.P., Mason A.J., Hayflick J.S., Seeburg P.H.; Mason A.J., Hayflick J.S., Seeburg P.H.; Insolation of the gene and hypothalamic cDNA for the common precursor of gonadotropin-releasing hormone and prolactin release-inhibiting factor in human and rat.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Rattus norvegicus (Rat).
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
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PYRROLIDONE CARBOXYLIC ACID.
AMIDATION (G-34 PROVIDE AMIDE GRCUP).
W -> 8 (in dbsNP:6185).
/FILGEVAR 013943.
30A72221E076FA79 CRC64;
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Bond C.T., Hayflick J.S., Seeburg P.H., Adelman J.P.;
"The rat gonadotropin-releasing hormone: SH locus: structure and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TISSUE=Thymus;
MEDLINE=93105480; PubMed=1468115;
Maier C.C., Marchetti B., Leboeuf R.D., Blalock J.E.;
Majoryces express a mRNa that is identical to hypothalamic
luceinizing hormone-releasing hormone mRNA.";
Cell. Mol. Neurobiol. 12:447-454(1992).
                                                                                                                                                                                                                                                                                                                                                                         Score 41, DB 1; Length 92;
Pred. No. 0.26;
1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Proc. Natl. Acad. Sci. U.S.A. 83:179-183(1986).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .. Endocrinol. 3:1257-1262(1989)
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                                                                                                                                                                                                                                                                        10380 MW;
                                                                                                                                                                                                                                                                                                                                                                                      82.0%;
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SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the FMBL outstation-the Buropean Bioinformatics Institute. There are or restrictions on its use by non-profit institutions as long as its content is in no way
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use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        placental mammal.";
Gen. Comp. Endocrinol. 104:7-19(1996).
-!- FUNCTION: Stimulates the secretion of gonadotropins; it stimulates the secretion of gonadotropins of the stimulates.
                                                                                                                                                                    PERMI, PF00446; GRRH; I.PRNI.
PRINTS; PR01541; GONADOLLERNI.
PRINTS: PS00473; GNRH; I.C.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus;
Placenta; Signal; Pyrrolidone carboxylic acid.
                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                      PROLACTIN RELEASE-INHIBITING FACTOR I. APPEARS TO BE ESSENTIAL FOR BIOLOGICAL
                                                                                                                                                                                                                                                                                                         PYRROLIDONE CARBOXYLIC ACID.
AMIDATION (G-34 PROVIDE AMIDE GROUP).
494B5C64DA8RA3EB3 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15-DEC-1998 (Rel. 37, Created)
15-DEC-1998 (Rel. 37, Last sequence update)
15-DEC-1998 (Rel. 41, Last annotation update)
Progonadoliberin I precursor [Contains: Gonadoliberin I (LH-RH I)
[Luteinizing hormone-releasing hormone I) (Gonadotropin-releasing
hormone I) (GnRH I) (Luliberin I); GnRH-associated peptide I].
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tupaia glis belangeri (Common tree shrew).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Scandentia, Tupaildae, Tupaia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "Characterization of two new preproGnRH mRNAs in the tree shrew:
first direct evidence for mesencephalic GnRH gene expression in
                                                                                                                                                                                                                                                                                                                                                                                   .
0
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MEDLINE=97079639; PubMed=8921350;
Kasten T.L., White S.A., Norton T.T., Bond C.T., Adelman J.P.,
                                                                                                                                                                                                                                                                                                                                                        Score 41; DB 1; Length 92;
Pred. No. 0.26;
1; Mismatches 3; Indels
                                                                                                                                                                                                                                                PROGONADOLIBERIN I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              92 AA
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                                                          EMBL; 850870; AAB24572.1; -... EMBL; M12579; AAA41265.1; -... EMBL; M15170; AAA41264.1; -... EMBL; M1552; AAA42141.1; ALT_SEQ. EMBL; M15529; AAA42141.1; ALT_SEQ. EMBL; M15529; AAA42139.1; -... EMBL; M15529; AAA42139.1; -... EMBL; M15529; ARA42139.1; -... EMBL; M15529; ARA42139.1; -... EMBL; M15529; ARA72139.1; -... EMBL; M15529; AAA42139.1; -... InterPro; IPR004072; GnRH.
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33
10500 MW;
                                                                                                                                                                                                                                                                                                                                                           82.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STANDARD;
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24 QHWSYGLRPG 33
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33
92 AA;
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Matches 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NCBI_TaxID=37347;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Fernald R.D.;
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                                                                                                                                                                                                                                                                                                          MOD_RES
MOD_RES
SEQUENCE
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ACT_SITE
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Q95335;
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GON1_TUPGB
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modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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CONZ. CHICK STANDARD; PRT; 10 AA.

CONZ. GRICK STANDARD; PRT; 10 AA.

O 1-FEB-1991 (Rel: 17, Created)

TO 1-FEB-1991 (Rel: 17, Last sequence update)

TO 28-FEB-2003 (Rel: 41, Last annotation update)

Connadoliberin II (Gonadorropin-releasing hormone II) (GnEH-II)

Connadoliberin II (Gonadorropin-releasing hormone II) (GnEH-II)

Callus gallus (Chicken);

Aligator mississippiensis (American alligator),

Aligator mississippiensis (American alligator),

Aligator (Spindy dogitah),

Aligator (Spindy dogitah),

Squalus acanthias (Spindy dogitah),

Squalus acanthias (Spindy dogitah),

Squalus Aversimes, Caniata (Caniata), and

Clupea pallasii (Recific herring).

Chrobasuria, Metazoa, Chordata; Craniata, Vertebrata; Euteleostomi;

Archosauria, Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
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SPECIES-A mississippiensis; TISSUE-Brain;
MEDITE-9135238; bubmed-1882082;
Lovejoy D.A., Fischer W.H., Parker D.B., McRory J.E., Park M.,
Lance V., Swanson P., Rivier J.E., Sherwood N.M.;
Pariary Structure of two forms of gonadotropin-releasing hormone
"Primary Structure American alligator (Alligator mississippiensis).";
Regul. Pept. 33:105-116(1991).
                                                                                                                                                                                            Pfam; PF00446; GRMH; 1.
PRINTS; PR01441; GONADOLIBRNI.
PROSITE; PR01471; GONADOLIBRNI.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus;
Placenta; Signal; Pyrrolidone carboxylic acid.
SIGNAL
1 23 BY SIMILARITY.
1 24 92 PROGONADOLIBRRIN I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AMIDATION (G-34 PROVIDE AMIDE GROUP) (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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Proc. Natl. Acad. Sci. U.S.A. 81:3874-3878 (1984).
                                                                                                                                                                                                                                                                                                                                                                                                                    GNRH-ASSOCIATED PEPTIDE I.
APPEARS TO BE ESSENTIAL FOR BIOLOGICAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               hormone in
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 41; DB 1; Length 92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pred. No. 0.26;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=9031, 8496, 7797, 7873, 30724;
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MEDLINE=84222059; PubMed=6427779;
                                                                                                                                   InterPro; IPR002012; GDRH.
InterPro; IPR004079; GonadoliberinI.
Pfam; PF00446; GDRH; 1.
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Best Local Similarity 60.0
Matches 6; Conservative
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24 QHWSYGLRPG 33
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                                                                                                                 EMBL; U63326; AAB16837
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P20367; P81751;
01-F82-1991 (Rel. 17, Created)
01-F82-1991 (Rel. 17, Last sequence update)
28-F82-2003 (Rel. 41, Last annotation update)
Gonadoliberin III (Gonadotropin-releasing hormone III) (GnRH-III) (LH-
                                                                                                                                                                                                                SPECIES—C. pallasi; TISSUE=Brain, and Pituitary;
MEDLINE=20114351; PubMed=10650929;
Carolsfeld J., Powell J.F., Park M., Fischer W.H., Craig A.G.,
Chang J.P., Rivier J.E., Sherwood N.M.;
Primary structure and function of three gonadotropin-releasing
hormones, including a novel form, from an ancient teleost, herring.";
Endocrinology 141:505-512(2000).
-i- FUNCTION: Stimulates the secretion of gonadotropins.
-i- SUBCELLULAR LOCATION: Secreted.
-i- SUMLARITY: Belongs to the GRRH family.
                                                                                                         SPECIES=H.colliei, TISSUE=Brain;
MEDLINE=91340067; PubMed=1678723;
Lovejoy D.A., Sherwood N.M., Fischer W.H., Jackson B.C., Rivier J.E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sherwood N., Eiden L., Brownstein M., Spiess J., Rivier J., Vale W., "Characterization of a teleost gonadotropin-releasing hormone."; Proc. Natl. Acad. Sci. U.S.A. 80:2794-2798(1983).
                                                                                                                                                        "Primary structure of gonadotropin-releasing hormone from the brain of a holocephalan (ratfish: Hydrolagus colliei).";
Gen. Comp. Endocrinol. 82:152-161(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Clupea pallasii (Pacific herring).
Wataryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Actinopterygii; Neopterygii; Teleostei; Euteleostei; Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
WCBI_TaxID=8018, 30724;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ..
                      Lovejoy D.A., Fischer W.H., Ngamvongchon S., Craig A.G.,
Lovejoy D.A., Fischer W.H., Ngamvongchon S., Craig A.G.,
Nahorniak C.S., Peter R.E., Rivier J.B., Sherwood N.M.;
"Distinct sequence of gonadotropin-releasing hormone (GnRH) in
dogfish brain provides insight into GnRH evolution.";
Proc. Natl. Acad. Sci. U.S.A. 89:6373-6377(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                    Score 40, DB 1; Length 10;
Pred. No. 0.043;
1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                             AMIDATION.
284B2E437871F5A3 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Oncorhynchus keta (Chum salmon), and
SPECIES=S.acanthias; TISSUE=Brain; MEDLINE=92335300; PubMed=1631133;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SPECIES=0.keta;
MEDLINE=83195140; PubMed=6341999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       10 AA; 1254 MW;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60.08;
                                                                                                                                                                                                                                                                                                                                                                                InterPro; IPR002012; GnRH.
Pfam; PF00446; GnRH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                        PROSITE; PS00473; GNRH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6; Conservative
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SEQUENCE, AND FUNCTION
                                                                                                                                                                                               (5)
SEQUENCE, AND FUNCTION
                                                                                                                                                                                                                                                                                                                                           PIR, A61126, A61126.
PIR, B46030, B46030.
PIR, B60066, RHAQ2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
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SEQUENCE
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                                                                                                SEQUENCE.
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SPECIES=C.pallasi; TISSUE=Brain, and Pituitary;
MEDLINE=20114351; PubMed=10650929;
Carolsfeld J., Powell J.F., Park M., Fischer W.H., Craig A.G.,
Chang J.P., Rivier J.E., Shewood M.M.;
"Ptimary structure and function of three gonadotropin-releasing
hormones, including a novel form, from an ancient teleost, herring.";
Endocrinology 141:505-512(2000)
-!- FUNCTION: Stimulates the secretion of gonadotropins; it stimulates
the secretion of both luteinizing and follicle-stimulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
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Elasmobranchii; Squalea; Squaloidei; Squalidae; Squalus.
NCBI_TaxID=7797;
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                                                                                                                                                                                                                                                       1 SIMILARITY. DOLLING. SCIENCE.
1 - SIMILARITY. DOLLING. SCIENCE.
1 - SIMILARITY. DOLLING. SCIENCE.
PIR, A21114; A21114.
InterPro, IPR002012; GnRH.
PFAM. PF00446; GnRH.
PROSITE, PS00473; GnRH; 1.
PROSITE AMIDATION CARBOXYLIC ACID.
MOD RES 10 AMIDATION.
SEQUENCE 10 AA; 1230 MW; 284B3233786B45A3 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-AUG-1992 (Rel. 23, Created)
01-AUG-1992 (Rel. 23, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Gonadoliberin (Gonadotropin-releasing hormone) (GnRH) (LH-RH)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 40; DB 1; Length 10;
Pred. No. 0.043;
1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 40; DB 1; Length 10;
Pred. No. 0.043;
1; Mismatches 3; Indels
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60.0%;
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InterPro; IPR002012; GnRH.
Pfam; PF00446; GnRH; 1.
PROSITE; PS00473; GNRH; 1.
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Best Local Similarity 60...
6; Conservative
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Best Local Similarity 60.6
Matches 6; Conservative
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Oncorhynchus tschawytscha (Chinook salmon) (King salmon).
Wataryota; Metacads, Chorderas, Craniata; Vertebrata; Buteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei;
Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
15-DEC-1998 (Rel. 37, Last sequence update)
28-FBB-2003 (Rel. 41, Last annotation update)
Gonadoliberin III precursor (Gonadotropin-releasing hormone III)
(GRR-III) (LH-RH III) [Luliberin III) (Fragment).
                                                                                                                                                                                                                                                                                                                                      SEQUENCE
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PEPTIDE
MOD RES
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GONZ_ORYLA
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Matches
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Pfam; PF00446; GRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus; Signal; Pyrrolidone carboxylic acid.
SIGNAL : A BY SIGNAL 
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDIINE-93386322; PubMed=1308825;
Alestroem P., Kisen G., Klungland H., Andersen O.;
Arish gonadotropin-releasing hormone gene and molecular approaches
for control of sexual maturation: development of a transgenic fish
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RITY).
(G-26 PROVIDE AMIDE GROUP).
                                                                                                                                                                                                                                                                                  Oncorbynchus mykiss (Rainbow trout) (Salmo gairdneri).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi;
Actinopterygii, Neopterygii, Teleostei; Buteleostei,
Protacanthopterygii, Salmoniformes; Salmonidae; Oncorbynchus.
NCBI_TAXID=8022;
                                                                                                                 01-0CT-1996 (Rel. 34, Created)
01-0CT-1996 (Rel. 34, Last sequence update)
01-0CT-2003 (Rel. 41, Last annotation update)
Gonadoliberin III precursor (Gonadotropin-releasing hormone III)
(GnRH-III) (LH-RH III) (Luliberin III) (Fragment).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Klungland H., Anderson O., Alestroem P., \hfill \hfill  "The salmon gonadotrophin-releasing hormone encoding gene in
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GNRH-ASSOCIATED PEPTIDE III.
PYRROLIDONE CARBOXYLIC ACID
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AMIDATION (G-26 PROVIDE
BD63C46D8228EF84 CRC64;
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PROGONADOLIBERIN III.
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                                                                74 AA

    Mar. Biol. Biotechnol. 1:420-425(1992)

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8254 MW;
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Best Local Similarity bu..

Best Conservative
                                                             STANDARD;
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74 AA;
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RESULT 24
GON3 ONCMY
ID GON3 ONCMY
AC P55246;
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74 AA.

PRT;

RESULT 25
GON3\_ONCTS
ID GON3\_ONCTS STANDARD;
1 Q92097;
DT 15-DEC-1998 (Rel. 37, Created)

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COURCES; QBJIOS;
TO-CCT-2003 (Rel. 42, Last sequence update)
TO-CCT-2003 (Rel. 42, Last annotation update)
TO-CCT-2003 (Rel. 42, Last a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                      Klungland H., Lorens J.B., Andersen O., Kisen G.O., Alestroem P.; "The Atlantic salmon prepro-gonadotropin releasing hormone gene and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (BY SIMILARITY).
AMIDATION (G-26 PROVIDE AMIDE GROUP).
BEAFOB783F80EF84 CRC64;
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GNRH-ASSOCIATED PEPTIDE III.
PYRROLIDONE CARBOXYLIC ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 40; DB 1; Length 74;
Pred. No. 0.32;
1; Mismatches 3; Indels
                                                                                                                                                                                                               BY SIMILARITY.
PROGONADOLIBERIN III.
                                                                           MEDLINE=92267241; PubMed=1587389;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 25
8254 MW;
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16
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FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 25
74 AA;
                                             TISSUE=Muscle
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL; D10946; BAA01740.1; -.
EMBL; S44614; AAB65599.1; -.
PIR, 151180; 151180.
InterPro; 1PR002012; GRH.
Pfam; PF00446; GRH!
PROSITE; PS00473; GRH!; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus;
                                                                                                                                                                                                                                                                                                           DEQUENCE FROM N.A.

MEDLINE-9234893; PubMed=1515027;

Sutuki M., Hyddo S., Kobayashi M., Aida K., Urano A.;

Sutuki M., Hyddo S., Kobayashi M., Aida K., Urano A.;

Sutuki M., Hyddo S., Kobayashi M., Aida K., Urano A.;

Sutuki M., Hyddo S., Kobayashi M., Aida K., Urano A.;

Gharacterization and localization of mRNA encoding the salmon-";

J. Mol. Endocrinol. 9:73-82[1992].

J. Mol. Endocrinol. 9:73-82[1992].

J. SUBCELLULAR LOCATION: Secreted.

J. SUBCELLULAR LOCATION: Secreted.

J. SUMILARITY: Belongs to the GREH family.
                                                                                                                                    Oncorhynchus masou (Cherry salmon) (Masu salmon).

Wataryota, Metacoa, Chordata, Craniata, Vertebrata; Euteleostomi;
Actinopterygii, Neopterygii, Toleostei, Buteleostei,
Protacanthopterygii, Salmoniformes; Salmonidae; Oncorhynchus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ARITY).
(G-34 PROVIDE AMIDE GROUP)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Oncorhynchus nerka (Sockeye salmon).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Actinopterygii; Neoptraygii; Teleostei; Buteleostei; Protecanthopterygii; Salmoniformes; Salmonidae; Salmo.
                     01-JUL-1993 (Rel. 26, Created)
01-JUL-1993 (Rel. 26, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Gonadoliberin III precursor (Gonadotropin-releasing hormone III)
(GRRH-III) (LH-RH III) (Luliberin III).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GON3 SALSA STANDARD; PRT; 82 AA.
P15659; P51920;
01-UUN-1994 (Rel. 29, Created)
01-UUN-1994 (Rel. 29, Last sequence update)
28-FRB-2003 (Rel. 41, Last annotation update)
Gonadoliberin III precursor (Gonadotropin-releasing hormone III)
(GRR-III) (LH-RH III) (Luliberin III).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 40; DB 1; Length 82;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GNRH-ASSOCIATED PEPTIDE III
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PYRROLIDONE CARBOXYLIC ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Salmo salar (Atlantic salmon), Salvelinus fontinalis (Brook trout) (Brook char), and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       7595A0B8964B9B86 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pred. No. 0.36;
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AMIDATION (G-34
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Signal; Pyrrolidone carboxylic acid. SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            33
9184 MW;
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24 QHWSYGWLPG 33
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82 AA;
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Best Local Similarity
Matches 6; Conserv
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PEPTIDE
MOD_RES
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REMBL; AB041310; BAB16300.1; -...

REMBL; AB041310; BAC6423.1; -...

REMBL; AB074500; BAC6423.1; -...

REMBL; AB074500013; Filuteinizing hormone-releasing factor activity; ISS.

GO; GO:0005275; P:development; ISS.

RO; GO:0007275; P:development; ISS.

RO; G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the SME outstation the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                        -:- SUBCELLULAR LOCATION: Secreted.
-:- TISSUE SPECIFICITY: Expressed in the cell bodies of a cluster of neurons in the midbrain tegmentum.
--- MISCELLANEOUS: Teleost species posses three paralogous GnRHs:
mdGnRH and cGnRH-II have been identified in tetrapods; sGnRH has
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
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                                                                                          Okubo K., Amano M., Yoshiura Y., Suetake H., Aida K.;
"A novel form of gonadotropin-releasing hormone in the medaka,
Oryzias latipes."
Biochem. Biophys. Res. Commun. 276:298-303(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              T -> A (IN REF. 2; BACO6423).
Y -> F (IN REF. 2; BACO6423).
S -> N (IN REF. 2; BACO6423).
A -> T (IN REF. 2; BACO6423).
CAE8F1B06B9AF26E CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 1; Length 80;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GONADOLIBERIN II.
GNRH-ASSOCIATED PEPTIDE II.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 40; DB 1
Pred. No. 0.35;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SIMILARITY: Belongs to the GnRH family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1; Mismatches
                       SEQUENCE FROM N.A., AND TISSUE SPECIFICITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    82
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                                                  IISSUE=Brain;
MEDLINE=20462954; PubMed=11006121;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60.0%;
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Best Local Similarity 60...
60...
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55
77
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                                                                                                                                                                                                                                                                                                                                                                                                                             similarity)
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GON3_ONCMA
ID GON3_ONCMA
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PEPTIDE
MOD_RES
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Gaps

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01-NOV-1995 (Rel. 32, Created)
01-NOV-1995 (Rel. 32, Last sequence update)
10-CCT-2003 (Rel. 42, Last annotation update)
Progonadoliberin III precursor [Contains: Gonadoliberin III
Cuteinizing hormone releasing hormone III) (Gonadotropin-releasing hormone III) (Gonadotropin-releasing hormone III) (Gonadotropin-seleasing hormone III)
                                                                                                                                                                                                                                                  Salmo trutta (Brown trout).

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei;
Protacanthopterygii; Salmoniformes; Salmonidae; Salmo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
TSSUB-Muscle;
Klungland H., Anderson O., Alestroem P.;
"The salmon gonadotrophin-releasing hormone encoding gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL; X79713; CAA56152.1; -. PIR; 151365; 151365.
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PEPTIDE
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GON2_DICLA
ID GON2_D
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              SOLUTION SOL
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                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
SPECUES-O.nerka; TISSUE=Liver;
SPECUES-O.nerka; TISSUE=Liver;
MEDLINE=9622767; PubMed=8674859;
Coe I.R., von Schalburg K.R., Sherwood N.M.;
"Characterization of the pacific salmon gonadotropin-releasing hormone gene, copy number and transcription start site.";
MONTONE SECOND NUMBER AND SECTION SECT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       InterPro; IPR002012; GnRH.
PF00446; GnRH; 1.
PROSITE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus;
                                                                                      SPECTES=S.salar, and S.fontinalis; TISSUE-Hypothalamus;
MEDLINE=92267241; PubMed=1587389;
Klungland H., Lorens J.B., Andersen O., Kisen G.O., Alestroem P.;
"The Atlantic salmon prepro-gonadotropin releasing hormone gene and mRNA.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (BY SIMILARITY).
AMIDDAION (G-34 PROVIDE AMIDE GROUP).
H -> Q.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SPECIES O. Merka; STRAIN=Nikko; TISSUE=Brain;
MEDLINE=96620547; PubMed=8546809;
Ashihara M., Suzuki M., Kubokawa K., Aida K., Urano A.;
Ashihara M., Suzuki M., Kubokawa K., Aida K., Urano A.;
"Two differing precursor genes for the salmon-type gonadotropin-
releasing hormone exist in salmonids.";
J. Mol. Endocrinol. 15:1-9(1995).
-!- FUNCTION: Stimulates the secretion of gonadotropins.
-!- SUBCELULUAR LOCATION: Secreted.
-!- TISSUE SPECIFICITY: Brain.
-!- SIMILARITY: Belongs to the GRRH family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 40; DB 1; Length 82;
Pred. No. 0.36;
1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Signal; Pyrolidone carboxylic acid.
SIGNAL
1 23 BY SIMILARITY.
CHAIN 24 82 PROGONADOLIBERIN III.
PEPTIDE 37 GONADOLIBERIN III.
PEPTIDE 37 GONADOLIBERIN III.
MOD_RES 24 24 PYRROLIDONE CARBOXYLIC ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8053F4E44A765408 CRC64;
                                                                                                                                                                                                                                                                           Mol. Cell. Endocrinol. 84:167-174(1992)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL, X79709, CAA56148.1) --
BMBL, X74957, CAA52912.1,
EMBL, X79712, CAA56151.1,
EMBL, X91408, CAA62751.1,
EMBL, D31469, BAA6667.1,
PIR, I51331, I51331.
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          NCBI_TaxID=8030, 8038, 8023;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9143 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 60.0
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 82 AA;
                                                                        FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                           SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
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Interror, Activities of BRH; 1.
PROSITE: P800473; GRRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus; Signal; Pyrrolidone carboxylic acid.
Signal; Pyrrolidone carboxylic acid.
                                                                                                                                                                                                                                                                  Gaps
                                                                                                                     GONADOLIBERIN III.
GNRH-ASSOCIATED PEPTIDE III (POTENTIAL)
REPROLIDORE CRABOXYLIC ACID.
AMIDATION (G-34 PROVIDE AMIDE GROUP).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dicentrarchus labrax (European sea bass).

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Percoidei;
Moronidae; Dicentrarchus
                                                                                                                                                                                                                                                                  .,
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16-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 40, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Gonadoliberin II precursor (Gonadocropin-releasing hormone:
(GnRH-II) (LH-RH II) (Luliberin II).
                                                                                                                                                                                                                           Score 40; DB 1; Length 82;
Pred. No. 0.36;
1; Mismatches 3; Indels
                                                                                                                                                                                            8053E9534A765408 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                              85 AA
                                                                                                                                                                                                                               80.0%;
                                                                                                                                                                                            82 AA; 9191 MW;
                                                                                                                                                                                                                                                                    6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                  STANDARD;
                                                                                                                                                                                                                                                                                                    1 EHWSXGXXPG 10
                                                                                                                                                                                                                                                                                                                          :||| | || | 24 QHWSYGWLPG 33
                                                                                                                                                                                                                                 Query Match
Best Local Similarity
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[1]
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Gaps

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82 AA

PRT;

STANDARD;

RESULT 29 GON3 SALTR ID GON3 SALTR AC P45653;

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Natl. Acad. Sci. U.S.A. 91:1423-1427(1994)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GON2 MORSA
073811;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CHAIN
PEPTIDE
PEPTIDE
PEPTIDE
MOD_RES
MOD_RES
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GON2 MORSA
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  à
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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01-UUN-1994 (Rel. 29, Last sequence update)
10-OCT-2003 (Rel. 42, Last annotation update)
Progonadoliberin II precursor [Contains Gonadoliberin II (Luteinizing
hormone releasing hormone II) (Gonadorropin-releasing hormone II)
(GRR-II) (LH-RH II) (Luliberin II); GRR-associated peptide II-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Interpro; IPR002012; GnRH.
PROSITE; PRO0446; GnRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus; Signal; Pyrrolidone carboxylic acid.
Signal; Pyrrolidone carboxylic acid.
Signal: Pyrrolidone carboxylic acid.
CHAIN 24 85 FOOGONADOLIBERIN II.
PEPPIDE 24 33 GONADOLIBERIN II.
PEPTIDE 37 85 GNRH-ASSOCIATED PEPTIDE II.
PEPTIDE 37 PRROLIDONE CARBOXYLIC ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (BY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Haplochromis burtoni (Burton's mouthbrooder).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Labroidei;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (BY SIMILARITY).
AMIDATION (G-34 PROVIDE AMIDE GROUP)
                                                                                                                                the
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MEDLINE=94151343; PubMed=8108425;
White S.A. Bond C.T., Francis R.C., Kasten T.L., Fernald R.D.,
Adelman J.P.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ..
                                                                   Zanuy
                                  MEDINE-20640016; PubMed=11086295;

Gonzalez-Martinez D., Madigou T., Zmora N., Anglade I., Zanuy Zohar Y., Elizur A., Munoz-Cueto J.A., Kah O.;

"Differential expression of three different prepro-GnRH (gonadotrophin-releasing hormone) messengers in the brain of european sea base (bicentrarchus labrax).";

J. Comp. Neurol. 429:144-155(2011)

-!- FUNCTION: Stimulates the secretion of gonadotropins (By
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "A second gene for gonadotropin-releasing hormone: cDNA and expression pattern in the brain.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 40; DB 1; Length 85; Pred. No. 0.37; 3; Indels 1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               F832C0698C842C64 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  85 AA.
                                                                                                                                                                                                                                    -!- SUBCELLULÂR LOCATION: Secreted.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL; AF224281; AAF62900.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GnRH-associated peptide II-2]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9646 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           80.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60.08;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        6; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               85 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NCBI_TaxID=8153;
                                                                                                                                                                                                                      similarity)
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  SECUENCE
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MEDLINE=99061809; PubMed=9845669;
Chow M., Kight K.E., Gothilf Y., Alok D., Stubblefield J., Zohar Y.;
Chow M.M., Kight K.E., Gothilf Y., alok D., Stubblefield J., Zohar Y.;
"Multiple GnRHs present in a teleost species are encoded by separate genes: analysis of the sbGnRH and cGnRH-II genes from the striped bass, Morone saxatilis.";
                                                                                                                                                                                                                                                                                                                                                                                                 PIR; A53453; A53453.

GO; GO:0005576; C:extracellular; NAS.
GO; GO:0005183; F:luteinizing hormone-releasing factor activity; NAS.
GO; GO:0005183; F:luteinizing hormone-releasing factor activity; NAS.
GO; GO:0005183; F:luteinizing hormone-releasing factor activity; NAS.
InterPro; IPR002012; GRH;
PROSITE; PS00446; GRH; 1.
PROSITE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus; Signal; Multigene family; Pyrrolidone carboxylic acid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GONADOLIBERIN II.
GNRH-ASSOCIATED PEPTIDE II-1 (POTENTIAL)
GNRH-ASSOCIATED PEPTIDE II-2 (POTENTIAL)
BYRROLIDONE CARBOXYLIC ACID.
AMIDATION (G-34 PROVIDE AMIDE GROUP).
CF8COEDBF277365F CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Percoidei;
-!- FUNCTION: Stimulates the secretion of gonadotropins.
-!- SUBCELLULAR LOCATION: Secreted.
-!- TISSUE SPECIFICITY: EXPRESSED IN ONLY ONE CELL GROUP IN THE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
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16-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 40, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (By
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 1; Length 85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              J. Wol. Endocrinol. 21:277-289(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PROGONADOLIBERIN II.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred. No. 0.37;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       85 AA.
                                                                                 MESENCEPHALON.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -!- SIMILARITY: Belongs to the GnRH family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 40;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -!- SUBCELLULAR LOCATION: Secreted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Morone saxatilis (Striped bass)
                                                                                                                                                                                                                                                                                                                                                                               EMBL; L27435; AAA74993.1; -.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 EHWSXGXXPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              33
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Best Local Similarity
Lag 6; Conserve
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37
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85 AA;
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and the EMBL outstation
                                                                                                       EMBL; AF056313; AAD03816.1; -
InterPro; IPR02012; GRH.
Pfun, PF00446; GRH; 1.
PROSTIE; PS00473; GRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus;
                                                                                                                                                                                                                                                                                                  (BY SIMILARITY).
AMIDATION (G-34 PROVIDE AMIDE GROUP) (BY
                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Holland M.C.H., Gothilf Y., Meiri I., King J.A., Okuzawa K., Blizur A., Zohar Y., "Levels of the native forms of GnRH in the pituitary of the gilthead seabream, Sparus aurata, at several characteristic stages of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bukaryota, Metazoa, Chordata, Cramiata, Vertebrata, Buteleostomi, Actinopterygii, Neopterygii, Teleostei, Buteleostei, Neoteleostei, Acanthomorpha, Acanthopterygii, Percomorpha, Perciformes, Percoidei,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Powell J.F.F., Zohar Y., Elizur A., Park M., Fischer W.H., Craig A.G., Rivler J.E., Lovejoy D.A., Sherwood N.M.; Three forms of gonadctropin-releasing hormone characterized from brains of one species. U.S.A. 91:12081-12085 (1994).
-!- FUNCTION: Stimulates the secretion of gonadctropins.
-!- SUBCELLULAR LOCATION: Secreted.
-!- MASS SPECTROMETRY: MM=1236.6; METHOD=MALDI; RANGE=24-33.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-OCT-1996 (Rel. 34, Created)
01-OCT-1996 (Rel. 34, Last sequence update)
01-OT-1996 (Rel. 34, Last annotation update)
Gonadoliberin II precursor (Gonadorropin-releasing hormone (GnRH-II) (LH-RH II) (Luliberin II).
                                                                                                                                                                                                                                                                                                                                                                         Score 40; DB 1; Length 85;
Pred. No. 0.37;
1; Mismatches 3; Indels
                                                                                                                                                                                                                                          GONADOLIBERIN II.
GNRH-ASSOCIATED PEPTIDE II.
PYRROLIDONE CARBOXYLIC ACID
                                                                                                                                                                                                                                                                                                                             SIMILARITY).
F832D5B3BC842C64 CRC64;
                                                                                                                                                                                          ignal; Pyrrolidone carboxylic acid.

23 BY SIMILARITY.

14 B5 PROGNADOLIBERIN II.

24 33 GONADOLIBERIN II.

37 GONADOLIBERIN II.

38 GONADOLIBERIN II.

38 GONADOLIBERIN II.

39 PRESOCIATED PEPT.
the Swiss Institute of Bioinformatics
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sparus aurata (Gilthead sea bream)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE=95083645; PubMed=7991588;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE=99061849; PubMed=9843645;
                                                                                                                                                                                                                                                                                                                                                                              80.08;
                                                                                                                                                                                                                                                                                                                                                                                            60.08;
                                                                                                                                                                                                                                                                                                                                              9673 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STANDARD;
                                                                                                                                                                                                                                                                                                             33
                                                                                                                                                                                                                                                                                                                                                                                                                                             1 EHWSXGXXPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24 OHWSHGWYPG 33
                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE OF 24-33.
TISSUE=Brain;
                                                                                                                                                                                                                                                                                                                                              85 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sparus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NCBI_TaxID=8175;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TISSUE=Brain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gonadal cycl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GON2 SPAAU
P51925;
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                                                                                                                                                                                                                                                                                                                                              SEQUENCE
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PEPTIDE
MOD_RES
between
                                                                                                                                                                                                                                                                                                             MOD_RES
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GONZ SPAAU
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the Buropean Bioinformatics Institute. There are no restrictions on its
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or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-OCT-1996 (Rel. 34, Created)
01-OCT-1996 (Rel. 34, Last sequence update)
28-FRB-2003 (Rel. 41, Last annotation update)
Progonadoliberin IIA precursor [Contains: Gonadoliberin II (LH-RH II)
Progonadoliberin sequence in (Contains: Gonadoliberin II (LH-RH II)
Actionizing hormone-releasing hormone II) (Gonadotropin-releasing hormone II) (GnRH II) (Luliberin II); GnRH-associated peptide IIA).
                                                                                                                                                                                                                                                                                                                       residues; Hormone; Amidation; Hypothalamus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Carassius auratus (Goldfish).

Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Actinopergaji; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
NCBI_TaxID=7957;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Lin X.-W., Peter R.E.; "Expression of salmon gonadotropin-releasing hormone (GnRH) and chicken GnRH-II precursor messenger ribonucleic acids in the brain and ovary of goldfish."; "Gen. Comp. Endocrinol. 101:282-296(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                       GONADOLIBERIN II.
GNRH-ASSOCIARID PEPTIDE II.
PYRROLIDONE CARBOXYLIC ACID.
AMIDATION (G-34 PROVIDE AMIDE GROUP).
B53165C1227722CC CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 40; DB 1; Length 85;
Pred. No. 0.37;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE OF 33-57 FROM N.A., AND TISSUE SPECIFICITY STRAIN-Comet, and Common; TISSUE-Liver; STRAIN-E00ect, and Common; TISSUE-Liver; Lin X.-W., Perer R.B.; Cloning and expression pattern of a second
                                                                                                                                                                                                                                                                                                                                                                                                              PROGONADOLIBERIN II.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ą
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               86
                                                                                                                                                                                          EMBL, U30325, AAA75447.1;
InterPro, IPR002012; GRH.
Pfam; PF0446; GnRH; 1.
PROSITE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Ho Signal; Pyrrolidone carboxylic acid.
SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
TISSUE=Brain;
MEDLINE=96276584; PubMed=8729938;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     80.08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          85 AA; 9543 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 EHWSXGXXPG 10
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24 QHWSHGWYPG 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity
Matches 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      hormone II) (Gni
GNRH2A OR GNRH2
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PEPTIDE
MOD RES
MOD RES
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                                                                                                                                                                                                                                                                                                                                                                                                                    CHAIN
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Cor send an Lundon Britania Cor send an Lundon Britania Cor send an Lundon Britania Cor Send Britania Protoso Cor Sendra Cor Sendra Cor Sendra Cor Sendra Cor Dr. Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus; KW Signal; Pyrrolidone carboxylic acid.

FT CHAIN 25 86 PROGONADOLIBERIN IIA.
FT CHAIN 25 86 GONADOLIBERIN IIA.
FT PEPTIDE 25 34 GONADOLIBERIN IIA.
FT PEPTIDE 38 86 GONADOLIBERIN IIA.
FT MOD_RES 25 7770 MW; 31488EDBECGDBD54 CRC64;

MOD RES 34 4 ANIDATION (G-35 PROVIDE ANIDE GROUP).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its most by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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STRAIN-Comet, and Common; TISSUE-Liver;
MEDLINE-97426020; PubMed-9289408;
Lin X.-W., Peter N.E.;
"Cloning and expression pattern of a second
[His5TrpTyre]gonadotropin-releasing hormone (chicken GnRH-H-II) mRNA
in goldfish: evidence for two distinct genes.";
Gen. Comp. Endocrinol. 107:262-272(1997).
-: FUNCTION: Stimulates the secretion of gonadotropins.
-: FUNCTION: Stimulates the secretion.
-: TISSUE SPECIFICITY: Oldactory bulbs, hypothalamus and
-: TISSUE SPECIFICITY: Oldactory bulbs, hypothalamus and
telencephalon, midbrain and posterior brain areas.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28-FEB-2003 (Rel. 41, Created)
28-FEB-2003 (Rel. 41, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Progonadoliberin IIB precursor [Contains: Gonadoliberin II (LH-RH II)
Progonadoliberin Annone-releasing hormone II) (Gonadotropin-releasing hormone II)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii, Neopterygii; Teleostel; Ostariophysi; Cypriniformes;
Cyprinidae; Carassius.
NCBI_TaxID=7957;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 40, DB 1; Length 86;
Pred. No. 0.38;
1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               86 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Carassius auratus (Goldfish).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; U40567; AAB86989.1; -. EMBL; U40665; AAB86990.1; -. InterPro; IPR002012; GnRH. Pfam; PF00446; GnRH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 EHWSXGXXPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25 OHWSHGWYPG 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CARAU
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GO2B CARAD
GO2B CARAD
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                                                                                                                                                                                                                                                            ö
                                                              PROGONADOLIBERIN IIB.
GONADOLIBERIN II.
GORH-ASSOCIATED PEPTIDE IIB.
PYRROLIDONE CARBOXYLIC ACID
(BY SIMILARITY).
AMIDATION (G-35 PROVIDE AMIDE GROUP) (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PROSITE; PSO0473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus;
Signal; Pyrrolidone carboxylic acid.
                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Clarias gariepinus (Sharptooth catfish) (African catfish).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Actinopterygii, Neopterygii, Teleostei, Ostariophysi, Siluriformes,
Clariidae, Clarias.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDIINE-92392113; PubMed-1520292;
Bogerd J., Li K.W., Janssen-Dommerholt C., Goos H.;
"Two gonadotropin-releasing hormones from African catfish (Clarias
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bogerd J., Zandbergen T., Andersson E., Goos H.; and Construction, characterization and expression of cDNAs encoding the artish-type and chicken-II-type gonadotropin-releasing-hormone precursors in the African catfish."; Eur. J. Biochem. 222:541-549(1994).
PROSITE; PS00473; GNRH; 1.

Cleavage on pair of basic residues; Hormone; Amidation; Signal;
Pyrrolidone carboxylic acid.
SIGNAL
CHAIN
25 86 PROGONADOLIBERIN IIB.
PEPTIDE 25 34 GONADOLIBERIN II.
PREPTIDE 25 94 GONADOLIBERIN II.
MOD_RES 25 PYRROLIDONE CARBOXYLIC ACID
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0
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01-NOV-1995 (Rel. 32, Last sequence update)
08-PEB-2003 (Rel. 41, Last annotation update)
Gonadoliberin II precursor (Gonadotropin-releasing hormone
                                                                                                                                                                                                                           Score 40; DB 1; Length 86;
Pred. No. 0.38;
                                                                                                                                                                                                                                                              3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gariepinus).",
Biochem. Biophys. Res. Commun. 187:127-134(1992).
-- FUNCTION: Stimulates the secretion of gonadotropins.
-- SUBCELLUIAR LOCATION: Secreted.
-- SIMILARITY: Belongs to the GRRH family.
                                                                                                                                                                                          AC1778CE75C1C313 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                     86 AA
                                                                                                                                                                                                                                                            1; Mismatches
                                                                                                                                                                         SIMILARITY)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gonadoliberin II precursor (Gonadot (GnRH-II) (LH-RH II) (Luliberin II)
                                                                                                                                                                                                                                                                                                                                                                                                                       PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TISSUE=Brain;
MEDLINE=94291651; PubMed=8020492;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL; X78047; CAA54969.1; -.
                                                                                                                                                                                                                           80.0%;
larity 60.0%;
Conservative
                                                                                                                                                                                           9917 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PIR; S45600; RHID2S.
InterPro; IPR002012; GRRH.
                                                                                                                                                                                                                                                                                                                                                                                                                       STANDARD;
                                                                                                                                                                                                                                                                                               1 EHWSXGXXPG 10
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                                                                                                                                                                                                                                           Local Similarity
hes 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE OF 25-34.
                                                                                                                                                                                           86 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
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ID GONZ_CLAGA
AC P43306;
                                                                                                                                                                                           SEQUENCE
                                                                                                                                                                                                                              Query Match
                                                                     CHAIN
PEPTIDE
PEPTIDE
MOD_RES
                                                                                                                                                          MOD_RES
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL, UG6668; AAB65770.1; -.

InterPro; IPR002012; GRH.

Pfam, PF00446; GRH.

Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus; Signal; Pyrrolidone carboxylic acid.

CHAIN

25 86 PROGNADOLIBERIN II.

PEPTIDE 25 34 GONADOLIBERIN II.

PEPTIDE 38 86 GNRH-ASSOCIATED PEPTIDE II.

MOD_RES 25 25 PYRROLIDONE CARBOXYLIC ACID
                                                                                                                                                                                                                                                                                                     MEDLINE—99121986; PubMed=9460654; Penlington M.C., Williams M.A., Sumpter J.P., Rand-Weaver M., Penlington M.C., Williams M.A., Sumpter J.P., Rand-Weaver M., Hoole D., Arme C., Arme C., Milliams M.A., Sumpter J.P., Rand-Weaver M., Isolation and characterisation of mRNA encoding the salmon- and chicken- II type gonadorrophin-releasing hormones in the releost fish Eutlius rutilus (Cyprinidae) ", J. Mol. Endocrinol. 19:337-346(1997), J. Mol. Endocrinol. 19:337-346(1997), Provinciula Location of gonadotropins.
-!- SUBCELLULAR LOCATION: Secreted.
-!- SIMILARITY: Belongs to the GRRH family.
                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostarlophysi; Cypriniformes;
Cyprinidae; Rutilus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (BY SIMILARITY).
AMIDATION (G-35 PROVIDE AMIDE GROUP)
(BY SIMILARITY).
931E8865357715F40 CRC64;
                                           15-DEC-1998 (Rel. 37, Created)
15-DEC-1998 (Rel. 37, Last sequence update)
28-FEB-2003 (Rel. 41, Last amnotation update)
Gonadoliberin II precursor (donadorropin-releasing hormone II)
(GRH-II) (LH-RH II) (Luliberin II).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 1; Length 86;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.38;
             86 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No. 0.38
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 40;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9838 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          80.08;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STANDARD;
             STANDARD;
                                                                                                                                                            (Roach)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 EHWSXGXXPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25 OHWSHGWYPG 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                   FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     86 AA;
                                                                                                                                                                                                                                    NCBI_TaxID=48668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PORNO
                                                                                                                                                                                                                                                                     SEQUENCE
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PEPTIDE
MOD_RES
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GON3_PORNO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GON3
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                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation-the European Bioinformatics Institute. There are no restrictions on its modified and profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pfan; PF00446; GnRH; 1.
PROSITE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (BY SIMILARITY).
AMIDATION (G-35 PROVIDE AMIDE GROUP)
D6EBD59151DC9915 CRC64;
                                 GONADOLIBERIN II.
GNRH-ASSOCIATED PEPTIDE II.
PYRROLIDONE CARBOXYLIC ACID.
AMIDATION (G-35 PROVIDE AMIDE GROUP).
4AD9F24597E77EBF CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Oncorhynchus mykiss (Rainbow trout) (Salmo gairdneri).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archinopterygii; Neopterygii; Teleostei; Buteleostei;
Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                    15-JUL-1998 (Rel. 36, Last sequence update)
28-REB-2003 (Rel. 41, Last annotation update)
Gonadoliberin II precursor (Gonadorropin-releasing hormone II)
(GRRH-II) (LH-RH II) (Luliberin II).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 1; Length 86;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3; Indels
                                                                                                                                              DB 1; Length 86;
                                                                                                                                                                               3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PYRROLIDONE CARBOXYLIC ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Penlington M.C.;
Submitted (SEP-1997) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: Stimulates the secretion of gonadotropins.
-!- SUBCELLULAR LOCATION: Secreted.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GONADOLIBERIN II.
GNRH-ASSOCIATED PEPTIDE II
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Signal, Pyrrolidone carboxylic acid.
SIGNAL 24 BY SIMILARITY.
124 BY SIMILARITY.
125 86 PROGONADOLIBERIN II.
                                                                                                                                              Score 40; DB 1;
Pred. No. 0.38;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 40; DB 1;
Pred. No. 0.38;
.; Mismatches
                                                                                                                                                                                                                                                                                                                                                  86 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -!- SIMILARITY: Belongs to the GnRH family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL; AF023618; AAB82559.1; -.
InterPro; IPR002012; GnRH.
                                                                                                                                                                                                                                                                                                                                                                                   15-JUL-1998 (Rel. 36, Created)
15-JUL-1998 (Rel. 36, Last seq
28-FEB-2003 (Rel. 41, Last anno
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9723 MW;
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24
86
34
86
25
34
9766 MW;
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Best Local Similarity 60...
6; Conservative
                                                                                                                                                                                 6; Conservative
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86 AA;
                                                                                                                                          Query Match
Best Local Similarity
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042241;
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SEQUENCE
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PEPTIDE
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PEPTIDE
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 SIGNAL
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GONZ_ONCMY
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STEETE TEETERS SOUND BY A WAY 
GNRH3. Porichthys notatus (Plainfin midshipman). Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; PS19<u>72;</u>
01-0CT-1996 (Rel. 34, Created)
01-0CT-1996 (Rel. 34, Last sequence update)
01-0CT-1996 (Rel. 41, Last annotation update)
Gonadoliberin III precureor (Gonadotropin-releasing hormone III)
(GRR-III) (LH-RH III) (Luliberin III) 89 AA.

38

RESULT

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Gaps

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3; Indels

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6; Conservative
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GON3 HAPBU
P45652;
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PEPTIDE
MOD_RES
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SPTTTTTT SORRENGE SORRE STATE TTTTT SORRE SORRE SORRE STATE TTTTTT SORRE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
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                                                                                                                                                                                                                                                                                                                                                                                                                                    This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstantics the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                         Grober M.S., Myers T.R., Marchaterre M.A., Bass A.H., Myers D.A.; "Structure, localization, and molecular phylogeny of a GnRH cDNA from a paracanthopterygian fish, the plainfin midshipman (Porichthys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pfam; PF00446; GnRH; 1.
PROSITE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus; Signal; Pyrrolidone carboxylic acid.
I 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROGONADOLIBERIN III.
GONADOLIBERIN III.
GNRH-ASSOCIATED PEPTIDE III (POTENTIAL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Dicentrarchus labrax (European sea bass).
Eukaryota, Metazoa, Chordata; Craniata; Vertebrata; Buteleostomi;
Actinopterygii; Neopterygii; Teleostei; Buteleostei; Necteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Percoidei;
   Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Paracanthopterygii; Batrachoididae; Porichthys.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (BY SIMILARITY).
AMIDATION (G-34 PROVIDE AMIDE GROUP)
AEDS32789B9F1475 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TISSUB=Brain;
MEDLINE=20540016; PubMed=11086295;
MEDLINE=20540016; PubMed=11086295;
Gonzalez-Martinez D., Madigou T., Zmora N., Anglade I., Zanuy S., Zohar Y., Elizur A., Munoz-Cueto J.A., Kah O.;
"Differential expression of three different prepro-GnRH
"Differential expressing hormone) messengers in the brain of the european sea bass (Dicentrarchus labrax).";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16-007-2001 (Rel. 40, Created)
16-007-2001 (Rel. 40, Last sequence update)
18-PORD-2003 (Rel. 41, Last amortation update)
Gonadoliberin III precursor (Gonadotropin-releasing hormone III)
(GRH-III) (LH-RH III) (Luliberin III).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
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Pred. No. 0.39;
1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                          Gen. Comp. Endocrinol. 99:85-99(1995).
-- FUNCTION: Stimulates the secretion of gonadotropins.
-- SUBCELLULAR LOCATION: Secreted.
-- SUBLIBARITY: Belongs to the GARH family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PYRROLIDONE CARBOXYLIC ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             90 AA
                                                                                                                    SEQUENCE FROM N.A.
MEDLINE=95385993; Pubmed=7657161;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10118 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; U41669; AACS9754.1; -.
EMBL; S79620; AAB35188.1; -.
InterPro; IPR002012; GREH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
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Best Local Similarity
6; Conserve
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89 AA;
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                                                                                                                                                                                                                                                                    notatus).";
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PEPTIDE
MOD_RES
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                                                                                                                                                                                                                                                                                                                                                                                                                               PROSITE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus;
Signal; Pyrrolidone carboxylic acid.
SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pfam; PF00446; GnRH; 1.
PROSITE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus;
Signal; Multigene family; Pyrrolidone carboxylic acid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GONADOLIBERIN III.
MRNH-ASSOCIANED PEPTIDE III (POTENTIAL).
PYRROLIDONE CARBOXYLIC ACID
(BY SIMILARITY)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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Actinopterygii, Neopterygii, Teleostei, Buteleostei, Neoteleostei,
Acanthomorpha, Acanthopterygii, Percomorpha, Perciformes, Labroidei,
Cichiidae, Astatoliapia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
MEDLINE=92049375; Pubmed=1944299;
MEDLINE=92049375; Pubmed=1944299;
MEDLINE=92049375; Pubmed=1944299;
Medline=128110 of Complementary DNA encoding the precursor for gonadotropin-releasing hormone and its associated peptide from a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AMIDATION (G-34 PROVIDE AMIDE GROUP)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-NOV-1995 (Rel. 32, Created)
01-NOV-1995 (Rel. 32, Last sequence update)
28-FRB-2003 (Rel. 41, Last annotation update)
Gonadoliberin III precursor (Gonadotropin-releasing hormone III)
(GRRH-III) (LH-RH III) (Luliberin III).
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0
J. Comp. Neurol. 429:144-155(2001).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 40; DB 1; Length 90;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        B06A7BA413930C67 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BY SIMILARITY.
PROGONADOLIBERIN III.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pred. No. 0.39;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Haplochromis burtoni (Burton's mouthbrooder)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1; Mismatches
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-!- SIMILARITY: Belongs to the GnRH family
                                                          similarity).
-!- SUBCELLULAR LOCATION: Secreted.
-!- SIMILARITY: Belongs to the GRRH family
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          90
                                                                                                                                                                                                                                                                                                                                                                                                       EMBL, AF224280; AAF62899.1; -. InterPro: IPR002012; GRFH. PFGM, PF00446; GRFH; 1. PROSITE; PS00473; GNRH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                33 33
90 AA; 10154 MW;
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InterPro; IPR002012; GnRH.
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us-09-857-115-7.rsp

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EMBL; AB074501; BAC06425.1;
PIR; JC7395; JC7395.
                                                                                                                                                                                                                                                                                                 MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GNRH3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 43
GON3 PAGMA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GON3
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                                                                                                                                                                                                            ô
                                                                                                                                                                                                                                                                                                                                                                          D GONG ORNEA STANDARD; PRT; 90 AA.

C Q9D49; (08103;
10-OCT-2003 (Rel. 42, Created)
T 10-OCT-2003 (Rel. 42, Last sequence update)
T 10-OCT-2003 (Rel. 42, Last sequence update)
T 10-OCT-2003 (Rel. 42, Last annotation update)
T 10-OCT-2003 (Rel. 42, Last andotation update)
T 11 (Luliberin III) (Gonadotropin releasing hormone III)
T 11 (Luliberin III) (Gonadotropin releasing hormone III)
T 11 (Luliberin III) (Gonadotropin releasing hormone III)
T 12 (Conadotropin releasing hormone III)
T 2 (Gonadotropin releasing hormone III)
T 3 (Gonadotropin releasing hormone III)
T 3 (Gonadotropin releasing hormone III)
T 3 (Gonadotropin releasing hormone III)
T 4 (Annotation III)
T 5 (Gonadotropin releasing hormone III)
T 5 (Gonadotropin releasing hormone III)
T 6 (Gonadotropin releasing hormone III)
T 7 (Annotation releasing hormone III)
T 7 (Annotation update)
T 8 (Gonadotropin releasing hormone III)
T 7 (Annotation update)
T 8 (Gonadotropin releasing hormone III)
T 9 (Gonadotro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -! - SUBCELLULAR LOCATION: Secreted.
-! - TISSUE SPECIFICITY: Expressed in neuron cell bodies of the nucleus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 olfactoretinals.
-!- MISCELLANEOUS: Teleost species possess three paralogous GDRHs:
mdGnRH and cGnRH-II have been identified in tetrapods; sGrRH has
no tetrapod ortholog and is thought to be a duplication of cGnRH-
                                                                                                                                                                                                          Gaps
                     PROGONADOLIBERIN III.
GONADOLIBERIN III.
GNRH-ASSOCIATED PEPTIDE III (POTENTIAL).
PYRROLIDONE CARBOXYLIC ACID
(BY SIMILARITY).
AMIDATION (G-34 PROVIDE AMIDE GROUP).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
MEDLINE=2133319.
MEDLINE=22133319.
Debade=12137956;
Okubo K., Mitani H., Naruse K., Kondo M., Shima A., Tanaka M.,
Asakawa S., Shimizu N., Yoshiura Y., Aida K.;
Structural characterization of GnRH loci in the medaka genome.";
Gene 293:181-189(2002).
-i- FUNCTION: Stimulates the secretion of gonadotropins (By
                                                                                                                                                                                                            .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE=20462954; PubMed=11006121;
Okubo K., Amano M., Yoshiura Y., Suetake H., Aida K.;
'A novel ferm of gonadotropin-releasing hormone in the medaka,
Oryzias latipes.'
Biochem. Biophys. Res. Commun. 276:298-303(2000).
                                                                                                                                                                         DB 1; Length 90;
                                                                                                                                                                                                            3; Indels
                                                                                                                                      B36362E9F4A53A4E CRC64;
                                                                                                                                                                         Score 40; DB 1;
Pred. No. 0.39;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIMILARITY: Belongs to the GnRH family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A., AND TISSUE SPECIFICITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL; AB041331; BAB16301.1; -. EMBL; AB041332; BAB16302.1; -. EMBL; AB041335; BAC06418.1; -.
                                                                                                                                      10096 MW;
                                                                                                                                                                         80.08;
                                                                                                                                                                                                              6; Conservative
           283
24
24
                                                                                                                                                                                                                                                  1 EHWSXGXXPG 10
                                                                                                                                                                                                                                                                                     24 OHWSYGWLPG 33
                                                                                                                                                                                           Local Similarity
                                                                                                                  33
90 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=8090;
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             1 4 4 E 2
4 4 E 4
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                                                                                                                                      SEQUENCE
                                                                                                                                                                           Query Match
                                               PEPTIDE
PEPTIDE
                                                                              MOD RES
                                                                                                                      MOD RES
         SIGNAL
                                                                                                                                                                                                                                                                                                                                                                GON3 ORYLA
                                                                                                                                                                                                              Matches
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         SETTTTES
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Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus;
Signal; Pyrrolidone carboxylic acid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TISSUE=05154651; PubMed=7851723;
MEDLINE=95154651; PubMed=7851723;
Okuzawa K., Araki K., Tanaka H., Kagawa H., Hirose K.;
Okuzawa K., Araki K., Tanaka H., Kagawa H., Hirose K.;
Molecular cloning of a CDNA encoding the prepro-salmon gonadotropin-releasing hormone of the red seabream.";
Gen. Comp. Endocrinol. 96:234-242(1994).
-!- FUNCTION: Stimulates the secretion of gonadotropins.
-!- SUBCELLULAR LOCATION: Secreted.
-!- SIMILARITY: Belongs to the GRRH family.
(BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pagrus major (Red sea bream) (Chrysophrys major).

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Actinopterygii; Neopterygii; Teleostei; Buteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Percoidei;
                                                                                                                                                                                                                                                                                                                                           AMIDATION (G-34 PROVIDE AMIDE GROUP)
SIMILARITY:
V -> M (IN REF. 2; BAC06425).
ARORSDC904747589 (RC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-0CT-1996 (Rel. 34, Created)
01-0CT-1996 (Rel. 34, Last sequence update)
28-FRB-2003 (Rel. 41, Last annotation update)
Gonadoliberin III precursor (Gonadotropin-releasing hormone III)
(GRH-III) (LH-RH III) (Luliberin III).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                         PROGONADOLIBERIN III.
GONADOLIBERIN III.
GURH.ASSOCIATED PEPTIDE III.
PYRROLIDONE CARBOXYLIC ACID (BY
SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 40; DB 1; Length 90;
Pred. No. 0.39;
1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 90 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; D26108; BAA05104.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                     10176 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                80.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              nterPro; IPR002012; GnRH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STANDARD;
                                                                                                                                                                                                                      1 EHWSXGXXPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24 OHWSYGWLPG 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pfam; PF00446; GnRH;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PIR; IS1095; IS1095.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sparidae, Pagrus.
NCBI_TaxID=143350;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                        90 AA;
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PEPTIDE
MOD_RES
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Gaps

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Indels

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Mismatches

1,

Conservative

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1 EHWSXGXXPG 10

24 OHWSYGWLPG

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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /lic acid.

BY SIMILARITY.

BY SIMILARITY.

BRACONADOLIBERIN III.

GONADOLIBERIN III.

GNRH-ASSOCIATED PEPTIDE III (FOTENTIAL).

PYRROLIDONE CARBOXYLIC ACID

(BY SIMILARITY).

(AMIDATION (G-34 PROVIDE AMIDE GROUP).
                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE=99061849; PubMed=9843645;
Holland M.C.H., Gothilf Y., Meiri I., King J.A., Okuzawa K.,
Elizur A., Zohar Y.,
"Levels of the native forms of GnRH in the pituitary of the gilthead
seabream, Sparus aurata, at several characteristic stages of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PROSÍTE; PS00473; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus;
                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Actinopterygii; Neopterygii; Teleostei; Buteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Percoldei;
BY SIMILARITY.
PROGOMBOLIBERIN III.
GONDOLIBERIN III.
GNRH-ASSOCIATED PEPTIDE III (POTENTIAL)
                                          PYRROLIDONE CARBOXYLIC ACID
(BY SIMILARITY)
AMIDATION (G-34 PROVIDE AMIDE GROUP).
                                                                                                                                                                                                                                                    01-OCT-1996 (Rel. 34, Created).
01-OCT-1996 (Rel. 34, Last sequence update)
01-OCT-2003 (Rel. 41, Last annotation update)
Gonadoliberin III precursor (Gonadotropin-releasing hormone III)
(GnRH-III) (LH-RH III) (Luliberin III).
                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 40; DB 1; Length 90; Pred. No. 0.39;
                                                                                                   DB 1; Length 90;
                                                                                                                          3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gonadal cyle.";
Gen. Comp. Endocrinol. 112:394-405 (1998).
--- FUNCTION: Stimulates the secretion of gonadotropins.
---- SUBCELLUAR LOCATION: Secreted.
---- SIMILARITY: Belongs to the GRRH family.
                                                                              FB4E5993868C2FBD CRC64;
                                                                                                               0.39;
                                                                                                   Score 40; DB 1
Pred. No. 0.39;
1; Mismatches
                                                                                                                                                                                                                               90 AA.
                                                                                                                                                                                                                                                                                                                        Sparus aurata (Gilthead sea bream).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Signal; Pyrrolidone carboxylic ac SIGNAL 1 23 BY SIGNAL 24 90 FROC PROC PEPTIDE 24 33 GOND PEPTIDE 37 82 GNBM MOD_RES 24 24 PYRE
                                                                   33 .
10070 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          33
10030 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL; U30311; AAA98845.1; -.
InterPro; IPR002012; GnRH.
Pfam; PF00446; GnRH; 1.
                                                                                                     80.08;
                                                                                                                60.08;
                                                                                                               Local Similarity 60.0
nes 6; Conservative
                                                                                                                                                                                                                               STANDARD;
                                                                                                                                                 1 EHWSXGXXPG 10
  24 QHWSYGWLPG 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         33
90 AA;
                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                              90 AA;
                                                                                                                                                                                                                                                                                                                                                                                  NCBI_TaxID=8175;
   1 4 4 L 4
                                                                                                                                                                                                                               SPAAU
                                                                                                                                                                                                                                                                                                                                                                         Sparidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local (
                                                                               SEQUENCE
                                                                                                     Query Match
                       PEPTIDE
PEPTIDE
                                            MOD_RES
                                                                                                                                                                                                                              GON3 SPP
P51923;
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  SIGNAL
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Local Similarity

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                                                                                                                                                                                                                                                                                                                                                                                                               "Molecular cloning, distribution and pharmacological characterization of a novel gonadotropin-releasing hormone (Trp8 GnRH) in frog brain."; Mol. Cell. Endocrinol. 164:197-204 (2000).
-!- FUNCTION: Stimulates the secretion of gonadotropins.
-!- SUBCELLULAR LOCATION: Serreted.
-!- TRSUE SPECTIFICITY: Expressed in forebrain but not in testis, ovary, kidney and liver.
-!- SIMILARITY: Belongs to the GnRH family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AMIDATION (G-35 PROVIDE AMIDE GROUP) (BY
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                                    16-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 40, Last sequence update)
10-OCT-2003 (Rel. 42, Last annotation update)
10-OCT-2003 (Rel. 42, Last annotation update)
(Trp. 8 gonadoliberin preursor (Trp. 8 gonadotropin-releasing hormone)
([Trp. 8]GRRH) (LH-RH) (Luliberin)
                                                                                                                                                                                                                                                                                                                                             MEDLINE=20477595; Pubmed=11026571;
Yoo M.S., Kang H.M., Choi H.S., Kim J.W., Troskie B.E., Millar R.P.,
                                                                                                                                                                Rana dybowskii (Dybovsky's frog) (Korean brown frog).
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Amphibia, Batrachia, Anura, Neobatrachia, Ranoidea, Ranidae, Rana
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRINTS; PRO1541; GONADOLIBRNI.
PROSITE; PS0043; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Signal;
Pyrrolidone carboxylic acid.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 40; DB 1; Length 90;
Pred. No. 0.39;
1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TRP-8 GONADOLIBERIN.
GNRH-ASSOCIATED PEPTIDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C3D573E78B52ABFA CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TRP-8 PROGONADOLIBERIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ä
90 AA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL; AF139911; AAF44343.1; -.
InterPro; IPR002012; GRRH.
InterPro; IPR004079; GonadoliberinI.
Pfam; PF00446; GRRH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRT;
  PRT;
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STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 EHWSXGXXPG
                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      90 AA;
                                                                                                                                                                                                                                                    NCBI_TaxID=71582;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             rišSUE=Brain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 46
GON2_RANCA
ID _GON2_RANCA
  GON8 RANDY
Q9IAUZ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE
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MOD_RES
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Matches
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RUTRU
                                                                          CARAU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
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092106;
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GON3 RUTRU
                                                  RESULT 47
GON3 CARAU
                                                                                                                                                                  GNRH3
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              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss institute of Bioinformatics and the EMBL outstation-the Buropean Bioinformatics Institute. There are no restrictions on its modified and this statement is a long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SIMILARITY).
AMIDATION (G-35 PROVIDE AMIDE GROUP) (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL, AF186096; AALO5971.1; -. GO, GO:0005576; C:extracellular; NAS. GO; GO:0005576; C:extracellular; NAS. GO; GO:0005183; F:luteinizing hormone-releasing factor activity; NAS. GO; GO:000975; F:hormone mediated signaling; NAS. GO; GO:000003; P:reproduction; NAS. InterPro; IPR002012; GRH.
                                                                                                                                                                                                                                                                                                                                                                                                 Isold=Q9DG36-2; Sequence=VSP_050476;
-:- TISSUE SPECIFICITY: Midbrain and hindbrain.
-:- DEVELOPMENTAL STAGE: Expressed at significantly higher levels during hibernation and post-breeding. Not expressed in pituitary.
-:- SIMILARITY: Belongs to the GRRH family.
                                                                                                                                                                                                                                                        "Cloning and characterization of cDNAs encoding the GnRH1 and GnRH2 precursors from bullfrog (Rana catesbeiana).";
J. Exp. Zool. 289:190-201(2001).
-!- FUNCTION: Stimulates the secretion of gonadotropins (By
                10-OCT-2003 (Rel. 42, Created)
10-OCT-2003 (Rel. 42, Last sequence update)
10-OCT-2003 (Rel. 42, Last annotation update)
110-OCT-2003 (LHRH II) (LHRH II) (LHRH II) (Luteinizing hormone II) (Gonadotropin releasing hormone II) (GORH II) (Luliberin II); GORH-associated peptide II
                                                                                                   GNRH2 OR GNRH II.
Rana catebbeiana (Bull frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea; Ranidae; Rana
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A. (ISOFORMS 1 AND 2), TISSUE SPECIFICITY, AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GONADOLIBERIN II.
GNRH-ASSOCIATED PEPTIDE II.
PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                    TISSUE=Hindbrain, and Midbrain;
MEDLINE=21102251; PubMed=11170016;
Wang L., Yoo M.S., Kang H.M., Im W.B., Choi H.S., Bogerd J.,
Kwon H.B.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 40; DB 1; Length 93;
Pred. No. 0.41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIMILARITY).
Missing (in isoform 2).
/FTId=VSP 050476.
B3DE9920DGF6EAA9 GRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PROGONADOLIBERIN II. GONADOLIBERIN II.
                                                                                                                                                                                                                                                                                                                                                Event=Alternative splicing; Named isoforms=2;
                                                                                                                                                                                                                                                                                                                                                                Name=1;
IsoId=Q9DG36-1; Sequence=Displayed;
                                                                                                                                                                                                                                                                                                           similarity).
-!- SUBCELLULAR LOCATION: Secreted.
-!- ALTERNATIVE PRODUCTS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL; AF192464; AAG21894.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10668 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              80.0%;
                                                                                                                                                                                                DEVELOPMENTAL STAGE.
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les 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      93 AA;
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                                                                                                                                                         NCBI_TaxID=8400;
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PEPTIDE
MOD_RES
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Matches
                                                                                             (GAP2)
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Pfam: PF00446; GREH; 1.
PROSITE; PS00473; GNEH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                    Bukaryota; Metazoa; Chordata: Craniata; Vertebrata; Buteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
Cyprinidae; Carassius.
NCBI_TaxID=7957;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (POTENTIAL)
                                                                                                                                                                                                                                                                          AMIDATION (G-34 PROVIDE AMIDE GROUP)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15-JUL-1998 (Rel. 36, Created)
15-JUL-1998 (Rel. 36, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Gonadoliberin III precursor (Gonadotropin-releasing hormone III)
(GRRH-III) (IH-RH III) (Luliberin III).
                             01-0CT-1996 (Rel. 34, Created)
01-0CT-1996 (Rel. 34, Last sequence update)
01-8-FEB-2003 (Rel. 41, Last annotation update)
Gonadoliberin III precursor (Gonadotropin-releasing hormone III)
(GRRH-III) (LH-RH III) (Luliberin III).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11c acid.
BY SIMILARITY.
BY SIMILARITY.
FROGNADOLIBERIN III.
GONADOLIBERIN III.
GONADOLIBERIN III.
KYRROLIDONE CARBOXYLIC ACID
(BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 40; DB 1; Length 94; Pred. No. 0.41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14405ED82ECD2BEB CRC64;
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94 AA.
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PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Signal; Pyrrolidone carboxylic | SIGNAL | 23 BY CHAIN | 24 94 PR PR PEPTIDE | 24 33 GO MOD RES | 24 PY PY
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10511 MW;
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                                                                                                                                                         Carassius auratus (Goldfish)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6; Conservative
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STANDARD;
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94 AA;
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Gaps

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3; Indels

1; Mismatches

Conservative

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Submitted (NOV-1998) to the EMBL/GenBank/DDBJ databases.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 EHWSXGXXPG 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   36
110 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Fernald R.D.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   hormones.
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SEQUENCE
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MOD_RES
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TUPGB
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                                                                                                                                                                             MEDLINE=98121986; PubMed=9460654;
Penlington M.C., Williams M.A., Sumpter J.P., Rand-Weaver M.,
Penlington M.C., Williams M.A., Sumpter J.P., Rand-Weaver M.,
Hoole D., Arme C.;
"Isolation and characterisation of mRNA encoding the salmon- and
chicken- II type gonadotrophin-releasing hormones in the teleost fish
Rutilus furlius (cyprinidae)..;
J. Mol. Endocrinol. 19:337-346 (1997).
-- FUNCTION: Stimulates the secretion of gonadotropins (By
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PEFAIR PF00446; GRRH; 1.
PROSTER; PROMOTO; GRRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Hypothalamus; Signal; Pyrrolidone carboxylic acid.
Signal; Pyrrolidone carboxylic acid.
SIGNAL
1 23 PR SIMILARITY.
CHAIN 24 94 GONADOLIBERIN III.
PEPPIDE 24 33 GONADOLIBERIN III.
PEPPIDE 24 GONADOLIBERIN III.
PEPPIDE 24 GONADOLIBERIN III.
PEPPIDE 24 PYROCOLIDONE CARBOXYLIC ACID
MOD RES 24 24 PYROLIDONE CARBOXYLIC ACID
// NAV SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PROGONADOLIBERIN III.
GONADOLIBERIN III.
GONADOLIBERIN III.
GONALOLIBERIN III.
GNRH-ASSOCIATED PEPTIDE III (POTENTIAL).
PYRROLIDONE CARBOXYLIC ACID
(BY SIMILARITY).
AMIDATION (G-34 PROVIDE AMIDE GROUP) (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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16-0CT-2001 (Rel. 40, Last sequence update)
28-FRB-2003 (Rel. 41, Last annotation update)
progonadoliberin II precursor (Contains: Gonadoliberin II (LH-RH II)
[Luteinizing hormone-releasing hormone II) (Gonadotropin-releasing hormone II) (GnRH II) (Luliberin II); GnRH-associated peptide II].
                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes; Cyprinidae; Rutilus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Suncus murinus (House shrew) (Musk shrew).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Insectivora; Soricidae; Crocidurinae; Suncus.
NCBI_TaxID=9378;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TISSUE=Brain;
White R.B., Kasten T.L., White S.A., Rissman B.F., Fernald R.D.;
"GRRH-II cDNA expression in the musk shrew.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
0
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                                                                                                                                                                                                                                                                                                                                                                                    -!- SUBCELLUTAR LOCATION: Secreted.
-!- SIMILARITY: Belongs to the GnRH family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pred. No. 0.41
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL; U60667; AAB65821.1; -.
InterPro; IPR002012; GnRH.
Pfam; PF00446; GnRH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  94 AA; 10683 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 80.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity 60.0
Matches 6; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           33
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             Rutilus rutilus (Roach)
                                                                                                                                                               TISSUE=Olfactory bulb;
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This SWISS-PROT entry is copyright. It is produced through a collaboration
                                                                                                                                                                                                                           This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its muse by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities a process agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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follicle-stimulating
it stimulates
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15-DEC-1998 (Rel. 37, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Progonadoliberin II precursor (Contains: Gonadoliberin II (LH-RH II)
Progonadoliberin programment (Contains)
Cuteinizing hormone-releasing hormone II) (Gonadotropin-releasing hormone II) (Gonadotropin-releasing hormone II) (Gonadotropin-releasing hormone II)
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GONADOLIBERIN II.
GNRH-ASSCIARED PEPTIDE II.
PYRROLIDONE CARBOXYLIC ACID
(BY SIMILARIY).
AMIDATION (G-37 PROVIDE AMIDE GROUP).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bukaryoča, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Scandentia, Tupaiidae, Tupaia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "Characterization of two new preproGnRH mRNAs in the tree shrew:
first direct evidence for mesencephalic GnRH gene expression in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL, AF107315, AADC9114.1; -.
InterPro; IPR002012; GnRH.
Pfam; PF00446; GnRH; 1.
PROSITE; PS00443; GNRH; 1.
Cleavage on pair of basic residues; Hormone; Amidation; Signal;
Pyrrolidone carboxylic acid.
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TISSUE-HYPOTALANLUS;
MEDLINE-97079639; PubMed=8921350;
Kasten T.L., White S.A., Norton T.T., Bond C.T., Adelman J.P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
0
-!- FUNCTION: Stimulates the secretion of gonadotropins; it stitute secretion of both luteinizing and follicle-stimulating hormones (By similarity).
-!- SUBCELLULAR LOCATION.
-!- TISSUE SPECTRITY: MIDBRAIN.
-!- SIMILARITY: Belongs to the GARH family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 40; DB 1; Length 110;
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1; Mismatches
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-!- TISSUE SPECIFICITY: MIDBRAIN.
-!- SIMILARITY: Belongs to the GRRH family.
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-!- FUNCTION: Stimulates the secretion of the secretion of both luteinizing and
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60.08;
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                                                                                                                                                                                                                                                              BY SIMILARITY.
PROGNADOLIBERIN II.
GONADOLIBERIN II.
GONATABOLIBERIN II.
GNRH-ASSOCIATED PEPTIDE II.
PYRROLIDONE CARBOXYLIC ACID
(BY SIMILARITY!).
AMIDATION (G-36 PROVIDE AMIDE GROUP).

M, 680E90EIC6869ECI CRC64;
                                                                                                                                       EMBL, U63327; AAB16838.1; -.

InterPro; IPR002012; GnRH.

PROSITE; P800473; GRRH; 1.

Cleavage on pair of basic residues; Hormone; Amidation; Signal; Pyrrollidone arboxylic acid.

BY SIMILARITY.

CHAIN

26 114 PROGNADOLIBERIN II.

PRETIDE 26 35 GONDOLIBERIN II.

PRETIDE 39 III.

MOD_RES 26 26 PYRROLIDOR CARBOXYLIC ACID
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80.0%; Score 40; DB 1; Length 114;
Best Local Similarity 60.0%; Pred. No. 0.5;
Matches 6; Conservative 1; Mismatches 3; IndelB
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114 AA; 12123 MW;
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| P71646 mycobacteri<br>Q7txu0 mycobacteri<br>Q8665 mus musculu<br>Q90659 arabidopsis<br>Q9vd6 aeropyrum p<br>Q8wyt5 homo sapien<br>Q8myt salmonella    | Q819g8 escherichia Q8x9s5 salmonella Q88b25 pseudomonas Q9x7x3 streptomyce Q9zxe5 bacteriopha              | Qppt52 agkistrodon<br>Q17228 caenorhabdi<br>Q7we01 bordetella<br>Q7w107 bordetella                        | Q9112 pseudomonas Q9vixo drosophila Q8eedo shewanella Q7ueche synechococo Q8hya8 preropus hy Q8hya7 saccopteryx, | Qyrots vizito cnoi<br>Qypose xanthomonas<br>Qesequenthabdi<br>Qekjd7 rhizobium 1<br>Qesequenthabdi<br>Qracc fusarium o<br>Qracc fusarium o | Q7vg34 helicobacte Q8x608 escherichia Q8erp2 oceanobacil P71662 mycobacteri Q7u050 mycobacteri Q7uvoz zhodopirell Q0eshr7 human panil                 | Q9ky53 erreptomyce<br>Q94dr9 oryza sativ<br>Q024dr9 cryza sativ<br>Q02495 schizophyll<br>Q8a28 pseudomonas<br>Q9nem5 caenorhabdi<br>Q9sy32 arabidopsis<br>Q95u94 mamestra co | 043319 aeromonas p<br>09598 aeromonas h<br>089hi4 aeromonas p<br>0915ds aeromonas h<br>084kp6 cyanidosch<br>089m87 symbiont ba<br>064428 chlorella v<br>07042 prochloroco<br>081823 arabidopsis | Q914H5 attabluopets Q924H4 uncultured Q929H8 listeria in Q875-4 listeria mo Q808L9 mus musculu Q8081 ovis aries Q9182 lactococcus Q9564 lactococcus Q9564 human immun Q91970 human immun Q91970 human immun Q91970 human immun Q91970 human immun Q91071 human immun Q91071 human immun Q91071 human immun Q91071 human immun Q91072 human immun Q91073 human immun Q91073 human immun Q91073 human immun Q91074 human immun Q91077 human immun |                          |
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| Q96ry6 homo sapien<br>Q89582 bovine herp<br>Q8w0h9 oryza sativ<br>Q99jn4 mus musculu<br>Q08782 cricetulus<br>Q8nke3 penicillium<br>Q45444 caenorhabdi | Q9kbn0 bacillus ha<br>Q84nql oryza sativ<br>Q8ngm5 homo sapien<br>Q81217 oryza sativ<br>O9map6 arabidopsis | Q9zdcB rickettsia<br>Q9pek2 xylella fas<br>Q9pgnl xylella fas<br>Q8edk1 pseudomonas<br>O87ec0 xylella fas | Q87ej4 xylella fas Q9vmvs drosophila Q9avc porcine rep Q9e80 porcine rep Q9e80 porcine rep Q9915 porcine rep     | Q9Wjb2 porcine rep<br>Q9enk6 porcine rep<br>Q80kx1 porcine rep<br>Q97oi porcine rep<br>Q9dln9 porcine rep<br>Q9dlp1 porcine rep            | QQain postine rep<br>QQain portine rep<br>QBuk61 agrobacteri<br>QTu628 synechococc<br>QByve8 anabasena sp<br>Q93d64 escherichia<br>QBpny7 xanthomonas | QBpca5 xanthomonas QByla6 raletonia s QBylo rhizobium l QBacq1 streptomyce QPvk60 drosophila OC552 mycobacteri Q7tw14 mycobacteri                                            | Q8267 Streptomyce Q98xf0 streptomyce Q88651 oryza sativ Q898w bradyrhizob Q871y4 vibrio para Q91pp5 arabidopsis Q9c7y7 mus musculu Q82ci6 streptomyce Q8ku2 1 Egionnyce                         | 098997 xenopus lae 088052 pseudodoonas 08009w9 orgrias lat 09kzv2 streptomyce p89427 human papil 090ze6 squalus aca P70064 xenopus lae P70062 xenopus lae 090zb6 xenopus lae 090zb6 xenopus lae 091zb4 caenopus lae 09fb2 streptomyce 052863 sodalis glo 09fb2 streptomyce 052863 sodalis glo 096584 mycobacteri                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | י ייפיאשם סיייסוד ופגכגס |
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                                                                                                                    | Quicho agrobacteri<br>Querro agrobacteri<br>Querro agrobacteri<br>Quento agrobacteri<br>Quento accale cere<br>Quento accale<br>Quento accale<br>Que                                                                                                                                                                                                                                                             | Q84768 OTYZA SALIV<br>Q94761 arabidopsis<br>Q7w1hs bordetella<br>P91541 caenorhabdi<br>Q7wp88 bordetella<br>Q9kn77 pseudomonas<br>Q9kn77 pseudomonas<br>Q9kn3 coccidioide<br>Q9n3j7 caenorhabdi<br>Q813j7 caenorhabdi<br>Q813j7 caenorhabdi<br>Q813j7 caenorhabdi | Q88.xx iactobacili Q88.rx iactobacili Q810a3 gamma-prote Q89.0bhwml pseudomonas Q8nf21 homo sapien Q28nms rhizobium m Q8udu7 agrobacteri Q9ahq8 gamma-prote Q8kxw3 gamma-prote Q81075 gamma-prote Q81075 gamma-prote Q81013 gamma-prote Q81083 gamma-prote Q81083 gamma-prote                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        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| 60000000000000000000000000000000000000                                                                                                                                                                                                                            | 30 60.0 329 16 QBRXX7<br>30 60.0 329 17 QBTRF1<br>30 60.0 332 2 QBL0A3<br>30 60.0 334 16 QBCH11<br>30 60.0 343 4 QBNF21<br>30 60.0 344 16 Q9ZMS8<br>30 60.0 352 2 QBMV2<br>30 60.0 352 2 QBMW7<br>30 60.0 352 2 QBL0B<br>30 60.0 352 2 QBLOB<br>30 60.0 352 16 QBNMZ6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              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Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Percoidei;
Sparidae; Acanthopagrus.
                                                                                                         SEQUENCE FROM N.A.
Kato M., Elmesiry G.E.;
"Sequence comparison of GnRH genes in closely-related Sparidae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRT;
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PROSITE; PS00473; GNRH; 1.
NON TER
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60.0%;
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ilarity 60.0%;
Conservative
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22,
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Q8JH60;
01-OCT-2002 (TFEMBLFEL. 2:
01-OCT-2002 (TFEMBLFEL. 2:
01-JUN-2003 (TFEMBLFEL. 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  6; Conservative
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Best Local Similarity
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TISSUE=Brain;
                                 Sparidae; Acantho
NCB1_TaxID=8177;
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SEQUENCE
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SEQUENCE
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Q7T1L2;
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ID 08
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        GO; GO:0005183; F:luteinizing hormone-releasing factor activity; IEA. GO; GO:0007275; Piedevelopment; IEA. InterPro; IPR002012; GnRH. InterPro; IPR004079; GnadoliberinI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pagrus major (Red sea bream) (Chrysophrys major).
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
Actinopterygii, Neopterygii, Teleostei, Euteleostei, Neoteleostei,
Acanthomorpha, Acanthopterygii, Percomorpha, Perciformes, Percoldei,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         080IF4:
080IF4:
080IF4:
01-0CT-2002 (TERMELrel. 22, Created)
01-0CT-2002 (TERMELrel. 24, Last sequence update)
01-0CT-2003 (TERMELrel. 24, Last annotation update)
01-0TN-2003 (TERMELrel. 24, Last annotation update)
Gonadotropin-releasing hormone (Fragment).
60nadotropin-releasing hormone (Fragment).
60nadotropin-releasing hormone (Fragment).
60nadotropin-releasing hormone;
60nado
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Pred. No. 1.1;
                                                                                                                                                                                                                                                                                        Score 42; DB 13; Length 64;
Pred. No. 1.1;
1; Mismatches 3; Indels
                                                                                                                                                                                                                        64 64
64 AA; 7028 MW; 1F91FFFB2B4BB6D0 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-OCT-2002 (TrEMBLrel. 22, Created)
01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
01-OTT-2003 (TrEMBLrel. 24, Last amnotation update)
Gonadotropin-releasing hormone (Fragment).
Pagrus major (Red sea bream) (Chrysophrys major).
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PRINTS; PR01541; GONADOLIBRNI.
                                                                                                               Pfam; PF00446; GnRH; 1.

PRINTS; PR01541; GONADOLIBRNI.

PROSTIE; PS00473; GNRH; 1.

NON_TER 64 64

SEQUENCE 64 AA; 7028 MW; 11
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60.0%;
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60.0%;
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Best Local Similarity 60...
Best 6; Conservative
                                                                                                                                                                                                                                                                       Ouery Match
Best Local Similarity 60...
6; Conservative
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SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sparidae; Pagrus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q8JIF2;
01-OCT-2002
01-OCT-2002
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QBJIF2
AC QBJIF2;
DT 01-OCT.
DT 01-OCT.
DT 01-UNI-
DE GONAGOCI
OS BUKATYO
OC ActinOP
OC Ac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q8JIF4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 3
QBJIF4
ID QBJI
DAC 01-0
DT 01-0
DT 01-0
DT GODA
OS ACAN
OC EUKAR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Guilgur L.G., Miranda L.A., Somoza G.M.;
"Characterization of three GnRH cDNA sequences in the pejerrey fish odonresthes bonariensis.";
Submitted (JUN 2003) to the EMBL/GenBank/DDBJ databases.
EMBL; AY320285; AAP84607.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Actinopterygii; Neopterygii; Teleostei; Buteleostei; Neoteleostei; Acanthomorpha; Acanthopterygii; Percomorpha; Atherinomorpha; Atheriniformes; Atherinoidei; Atherinidae; Atherinipsinae;
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Pred. No. 1.2;
1; Mismatches 3; Indels
                                                                       Score 42; DB 13; Length 68;
Pred. No. 1.2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  72 AA; 8064 MW; 0FAACA4E2AB792BF CRC64;
68 68 AA; 7543 MW; 067708609FE8E771 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Created)
Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-0CT-2003 (TrEMBLrel. 25, Created)
01-0CT-2003 (TrEMBLrel. 25, Last sequence update)
01-0CT-2003 (TrEMBLrel. 25, Last annotation update)
Gonadotropin-releasing hormone (Fragment)
Odontesthes bonariensis
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Gonadotropin-releasing hormone.

8 qq

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Query Match
Best Local Similarity 60...
Best Good 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRELIMINARY;
                                  PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 EHWSXGXXPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               hormone precursor).
GNRH1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
                                    QBJFY3
QBJFY3;
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            RESULT 7
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                         Q8JFY3
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EMBL, AFG46801, AAD02427.1; -.

GO; GO:0005576, C:extracellularing.

GO; GO:0005183, F:luteiniaring hormone-releasing factor activity, IEA.

GO; GO:0007275; P:development; IEA.
                                                                                                                                                                                                                                                                                                                                                                             OSYI26;
01-MAY-1999 (TrEMBLrel. 10, Created)
01-MAY-1999 (TrEMBLrel. 10, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
8DGATH (Gonadoliberin) (Gonadotropin-releasing hormone) (LH-RH)
Sparus aurata (Gilthead sea bream)
Sparus aurata, Golthead sea bream)
Actinopterygii, Neopterygii, Teleostei, Buteleostei, Mecteleostei,
Actinopterygii, Neopterygii, Percomorpha, Perciformes, Percoidel;
                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
Alosa sapidissima (American shad).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Actinopterygii, Neopterygii, Teleostei, Clupeomorpha, Clupeidae,
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                                                                            SEQUENCE FROM N.A.

Abraham E., Gothilf Y., Zohar Y.;

Abraham E., Gothilf Y., Zohar Y.;

American shad (Alosa sapidissima) hrGnRH sequence.";

Submitted (AUG-2002) to the EMBL/GenBank/DDBJ databases.

EMBL, AFS5381; AAN0492.1;

GO; GO:0005179; P:hormone activity; IEA.

R GO; GO:0007275; P:development; IEA.

InterPro; IPR002012; GnRH.

R Pfam; PF00446; GnRH; 1.

R PFam; PF00446; GnRH; 1.

R PSOIIE; PS00473; GNRH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (BY
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Pred. No. 1.5;
1; Mismatches 3; Indels
                                                                                                                                                                                                                              Score 42; DB 13; Length 86; Pred. No. 1.5;
                                                                                                                                                                                                                                                         3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nabissi M.;
Submitted (FEB-1998) to the EMBL/GenBank/DDBJ databases
-!- FUNCTION: STIMULATES THE SECRETION OF GONADOTROPINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0D2463533D96782A CRC64;
                                                                                                                                                                                                                                          ed. No. 1.5;
Mismatches
                                                                                                                                                                                                                                                                                                                                                                  87 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        InterPro; IPR002012; GnRH.
InterPro; IPR004079; GonadoliberinI.
Pfam; PF00446; GnRH; 1.
                                                                                                                                                                                                                                                                                                                                                                  PRT;
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PROSITE; PS00473; GNRH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              84.0%;
60.0%;
                                                                                                                                                                                                                                 84.0%;
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                                                                                                                                                                                                                     Query Match
Best Local Similarity 60.0
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Best Local Similarity 60.0
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                   PRELIMINARY;
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                                                                                                                                                                                                                                                                               1 EHWSXGXXPG 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Amidation; Hormone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                      SEQUENCE FROM N.A.
                                      Alosa.
NCBI_TaxID=34773;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sparidae, Sparus.
NCBI_TaxID=8175;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IISSUE=Ovary;
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21 OHWSYGLSPG 30

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01-MRA.2002 (TrEMBLrel. 20, Created)
01-MAR.2002 (TrEMBLrel. 20, Last sequence update)
01-UNA-2003 (TrEMBLrel. 24, Last annotation update)
01-UNA-2003 (TrEMBLrel. 24, Last annotation update)
Seabream-type gonadotropin-releasing hormone precursor (Gonadoliberin)
(GARH) (LH-MH) (LH-MH).
Verasper moseri (Barfin flounder).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Actinopterygli, Neopterygli, Teleostei, Euteleostei, Neoteleostei,
Pleuronectoidei, Pleuronectidae, Verasper.
NCBI TAXID=94923;
                                                                                                                                                                                        Orecchromis niloticus (Nile tilapia) (Tilapia nilotica).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
Actinopterygii, Neopterygii, Teleostei, Euteleostei, Neoteleostei,
Acanthomorpha, Acanthopterygii, Percomorpha, Perciformes, Labroidei,
Cichlidae, Orecchromis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Saton N.A.
Saton N.A.
Saton H., Sakuma Y., Parhar I.S.;
Saton H., Sakuma Y., Parhar I.S.;
Saton H., Sakuma Y., Parhar I.S.;
Saton In tilapia (Oreochromis niloticus).";
Submitted (MRA.2020) to the EMBL/GenBank/DDBJ databases.
EMBL; AF467291; AAM90220.1; --
EMBL; AB104861; BAC65154.1; --
GO; GO:0005276; C:extracellular; IEA.
GO; GO:0005183; F:luteiniaring hormone-releasing factor activity; IEA.
GO; GO:0007275; P:development; IEA.
InterPro; IPR002012, GnRH.
InterPro; IPR002012, GnRH.
InterPro; IPR004079; GondoliberinI.
Pfam: PP0046; GnRH; I.
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                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
Farahmand H., Rahman M.A., Sohm F., Hwang G.-L., Maclean N.;
Farahmand H., Rahman M.A., Sohm F., Hwang G.-L., Maclean N.;
Frolation and Expression of Tilapia (Oreochromis niloticus) Serine
Type GnRH Coding and Regulatory Sequences.";
Type GnRH Coding and Lo the EMBL/GenBank/DDBJ databases.
                                         01-0CT-2002 (TrEMBLrel. 22, Created)
01-0CT-2002 (TrEMBLrel. 22, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
GRRHl preprohormone precursor (Seabream-type gonadotropin-releasing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GONADOTROPIN-RELEASING HORMONE.
GNRH-ASSOCIATED PEPTIDE.
E57DBA832FC078D7 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 42; DB 13; Length 94;
Pred. No. 1.6;
1; Mismatches 3; Indels
Ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                96 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                POTENTIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRINTS; PR01541; GONADOLIBRNI.
PROSITE; PS00473; GNRH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 22 P
23 32 G
36 94 G
94 AA; 10396 MW;
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us-09-857-115-7.rspt

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MEDLINE=22583575; PubMed=12697698; Marby C., Hong D.J., Addams B.A., Tallo J.A., Erchegyi J., Warby C., Hong D.J., Akinsanya K.O., Mackie G.O., Vale W., Rivier J.E., Sherwood N.M.; Six Novel Gonadotropin-Releasing Hormones Are Encoded as Triplets on Each of Two Genes in the Protochordate, Ciona intestinalis."; Endocrinology 144:1907-1919 (2003).

EMBL; AX204706; AAP06793.1; -.. GO; GO:0005576; C:extracellular; IEA.

GO; GO:000575; P:hormone activity; IEA.

GO; GO:0002755; P:development; IEA.
                                                                                                                                                                                                                                                                                                                                                                                 Mohamed J.S., Thomas P., Khan I.A.;
"Micropogonias undulatus mRNA for seabream-type gonadotropin-releasing
                                                                                                                                                  01-0CT-2003 (TrEMBLrel. 25, Created)
01-0CT-2003 (TrEMBLrel. 25, Last sequence update)
01-0CT-2003 (TrEMBLrel. 25, Last annotation update)
01-0CT-2003 (TrEMBLrel. 25, Last annotation update)
Scabream-type gonadctroplar-releasing hormone.
Micropogonias undulatus (Atlantic croaker).
Micropogonias undulatus (Atlantic croaker).
Rukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Actinopterygii, Neopterygii, Teleostei, Euteleostei, Neoteleostei,
Acanthomorpha, Acanthopterygii, Percomorpha, Perciformes, Percoidei,
Sciaenidae, Micropogonias.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-JUN-2003 (TrEMBLrel. 24, Created)
01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Preprogonadotropin-releasing hormone 1 precursor.
Cina intestinals.
Cina intestinals.
Phlebobranchia; Cionidae; Ciona.
Phlebobranchia; Cionidae; Ciona.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gonadotropin-releasing hormone 3.
gonadotropin-releasing hormone 5.
gonadotropin-releasing hormone 6.
GnRH-associated peptide.
BBA0545882DCD8F7 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 42, DB 13; Length 120;
Pred. No. 2.1;
1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                          hormone precursor.";
Submitted (JUN-2015) to the EMBL/GenBank/DDBJ databases.
EMBL; AY214668; AAQ15501.1; -.
SEQUENCE 120 AA; 13236 MW; 33334470D2E35492 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 5;
                                                                                                                 120 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 42;
Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        84.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 60.0%;
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pfam, PF00446; GnRH; 2.
PROSITE; PS00473; GNRH; 3
                                                                                                                   PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 EHWSXGXXPG 10
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:||| | ||
23 QHWSYGLSPG 32
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138
151
219 AA;
                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=29154;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
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                                                                                                                   Q7T059
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Q86D90
                                                                               RESULT 10
                                                                                                   Q7T059
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      "Molecular cloning of three cDNAs encoding GnRH in the brain of barfin
                                                                                                                                                                                                                                                                                                                                                                     GONADOTROPIN-RELEASING HORMONE ASSOCIATED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Q805A5;
Q805A5;
Q805A5;
Q1-JUN-2003 (TrEMBLrel. 24, Created)
Q1-JUN-2003 (TrEMBLrel. 24, Last sequence update)
Q1-JUN-2003 (TrEMBLrel. 25, Last sequence update)
Q1-QCT-2003 (TrEMBLrel. 25, Last senocation update)
Seabream-type gonadotropin-releasing hormone precursor.
Oreochromis niloticus (Nile tilapia) (Tilapia nilotica).
Creochromis metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Buteleostei; Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Labroidei; Cichlidae; Oreochromis.
                                                                                           -i- SIMILARIII).

-i- SIMILARIIII).

EMBL, AB066360; BAB83984.1; -
G0; G0:0005576; C:extracellularii IEA.
G0; G0:0005775; P:dtveinizing hormone-releasing factor activity; IEA.
G0; G0:0007275; P:development; IEA.
InterPro; IPR002012; GnRH.
InterPro; IPR004079; GnadoliberinI.
Pfam; PF0446; GnRH; 1.
PRINTS; PRO1541; GONADOLIBRNI.
Amidation; Hormone; Signal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Parhar I.S., Ogawa S., Sakuma Y.;
"Molecular cloning of tilapia (Oreochromis niloticus) GnRH cDNA.";
"Molecular cloning of tilapia (Oreochromis niloticus) GnRH cDNA.";
Submitted (FEB-2003) to the EMBL/GenBank/DDBJ databases.

GO, GO:000576; C:extracellular; IEA.

GO, GO:000578; F:luteinizing hormone-releasing factor activity; IEA.

GO, GO:0007275; P:development; IEA.

InterPro; IPR002012; GnRH.
InterPro; IPR004079; GonadoliberinI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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HORMONE.
                                                                                                                                                                                                                                                                                                                                SEABREAM-TYPE GONADOTROPIN-RELEASING
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0
                                          Submitted (JUL-2001) to the EMBL/GenBank/DDBJ databases.
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Pred. No. 1.7;
1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 42; DB 13; Length 96;
Pred. No. 1.7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3; Indels
                                                                                                                                                                                                                                                                                                                                                                                   PEPTIDE.
PA3202565EA00DCC CRC64;
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PROSITE; PS00473; GNRH; 1.
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98 AA;
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nes 6; Conserv
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SEQUENCE FROM N.A.
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Q9W7G0
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Adams B.A., Tello J.A., Erchegyi J., Warby C., Hong D.J.,
Akineanya K.O., Mackie G.O., Vale W., Rivier J.E., Sherwood N.M.;
Akineanya K.O., Mackie G.O., Vale W., Rivier J.E., Sherwood N.M.;
T. Six Novel Gonadotropin.Releasing Hormones Are Encoded as Triplets on Star Novel Gonadotropin.Releasing Hormones Are Encoded as Triplets on Triplets on the Protochordate, Ciona intestinalis.";
Embl. AV204707; AAP06794 1; -
R GO, GO:0005576; C:extracellular; IEA.
R GO; GO:0005179; F:hormone activity; IEA.
R GO; GO:0005179; R:hormone activity; IEA.
R GO; GO:0005179; R:hormone activity; IEA.
R PROSITE; PS00446; GRRH. 2.
R PROSITE; PS004473; GNRH, 3.
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"Expression of two gonadotropin-releasing hormone (GnRH) precursor genes in various tissues of the Japanese eel and evolution of GnRH."; [201. Sci. 16:471-478(1999).
          Gaps
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2003 (TrEMBLrel. 14, Last annotation update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
1-JUN-2003 (TrEMBLrel. 26, Last annotation update)
1-MORINIL Japonica (Gonadoliberin) (Gonadotropin-releasing hormone) (LH-RH) (Luliberin).
1-MORINIL Japonica (Japonese eel).
1-MORINIL Japonica (Japonese eel).
1-MORINIL Japonica (Japonese eel).
1-MORINIL Japonica (Mordata, Craniata, Wertebrata, Euteleostomi, Actinopterygii, Teleostei, Anguilliformes, Anguillidae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-070-2003 (TrEMBLrel. 24, Created)
01-070-2003 (TrEMBLrel. 24, Last sequence update)
01-071-2003 (TrEMBLrel. 25, Last annotation update)
01-071-2003 (TrEMBLrel. 25, Last annotation update)
Preprogonadotropin-releasing hormone 1 precursor.
Eukaryota, Metazoa, Chordata, Urochordata, Ascidiacea, Enterogona, Phiebobranchia, Cionidae, Ciona.
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gonadotropin-releasing hormone 5.
gonadotropin-releasing hormone 6.
GnRH-associated peptide.
BB93576CAIDFEBF7 CRC64;
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Pred. No. 4;
1; Mismatches 3; Indels
          Indels
               3,
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               1; Mismatches
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89 97 go
115 124 go
138 147 go
151 219 Gn
219 AA, 24956 MW,
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60.0%;
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Best Local Similarity 60.0
Matches 6; Conservative
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               6; Conservative
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                                                                                                                                                                                                         138 OHWSKGYSPG 147
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NCBI_TaxID=7937;
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Q9PRH0
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086D89
AC 086D89
AC 086D8
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DT 01-JU
DT 01-JU
DT 01-JC
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DE PETT
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Okubo K., Suetake H., Aida K.;

A splicing variant for the prepro-mammalian gonadotropin-releasing
T A splicing variant for the prepro-mammalian gonadotropin-releasing
T P A splicing variant for the prepro-mammalian gonadotropin-releasing
T P Peripheral tiseues of the Japanese eel.";
T Cool. Sci. 16:645-651(1999).
C -1- FUNCTION: STIMULATES THE SECRETION OF GONADOTROPINS (BY
SIMILARITY: BELONGS TO THE GNRH FAMILY.

EMBL; AB02699; BAA82608.1; -.
NR EMBL; AB02699; BAA82608.1; -.
NR GO; GO:0005576; C:extracellular; IEA.
GO; GO:0005183; F:luteinizing hormone-releasing factor activity; IEA.
NR GO; GO:000212; GNRH.
NR InterPro; IPR004079; Gonadoliberini.
NR InterPro; IPR004079; Gonadoliberini.
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Bukaryota: Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Actinopterygii; Neopterygii; Teleostei; Buteleostei; Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
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MEDLINE=99312119; PubMed=10385393;
Von Schalburg K.R., Sherwood N.M.,
"Regulation and expression of gonadotropin-releasing hormone gene differs in brain and gonads in rainbow trout.";
Endocrinology 140:3012-3024(1999).
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01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
01-TON-2003 (TrEMBLrel. 24, Last annotation update)
Gonadotropin-releasing hormone (Gonadoliberin) (GnRH) (LH-RH)
(Luliberin) (Fragment).
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Pred. No. 2.4;
1; Mismatches 3; Indels
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-1- SIMILARITY: BELONGS TO THE GNRH FAMILY.
EMBL, PAR110993; AAD43463.1,.
GO; GO:0005576; C:extracellular; IEA.
GO; GO:0005179; F:hormone activity; IEA.
GO; GO:0007179; F:hormone activity; IEA.
InterPro; IPR02012; GnRH.
PROSITE; PE00446; GRRH; 1.
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PROSITE; PS00473; GNRH; 1.
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60.0%;
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Amidation; Hormone; Signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 60.0
Matches 6; Conservative
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80.0%;
ilarity 60.0%;
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PROSITE; PS00473; GNRH; 1.
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PROSITE; PS00256; AKH; 1.
PROSITE; PS00473; GNRH; 1.
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Matches 6; Conservative
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Best Local Similarity
Matches 6; Conserv
                                                                                                                                        SEQUENCE FROM N.A.
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01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
releasing hormone precursor II isoform C) (Gonadoliberin) (GnRH) (LH
RH) (Auliberin).
RH) (Auliberin).
Oncorhynchus mykiss (Rainbow trout) (Salmo gairdneri).
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
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MEDLINE=99312119; PubMed=10385393;
Won Schalburg K.R., Sherwood N.M.;
"Regulation and expression of gonadotropin-releasing hormone gene differs in brain and gonads in rainbow trout.";
Endocrinology 140:3012-3024(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Oncorpynchus mykiss (Rainbow trout) (Salmo gairdneri).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii, Neopterygii; Teleostei; Euteleostei;
Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
Gonadotropin-releasing hormone (Gonadoliberin) (GnRH) (LH-RH)
(Luliberin) (Fragment).
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                                   Score 40; DB 13; Length 33; Pred. No. 1.3;
                                                                                                             3; Indels
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InterPro; IPR002012; GnRH.
Pfam; PF00446; GnRH; 1.
PROSITE; PS00256; AKH; 1.
PROSITE; PS00473; GNRH; 1.
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60.0%;
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Best Local Similarity 60..
6; Conservative
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                                              Query Match
Best Local Similarity
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Q9PT34;
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10 09PT34
10 09PT34
11 001-MA
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"Stage-dependent and alternative splicing of sGnRH messengers in rainbow trout testis during spermatogenesis.";
Mol. Reprod. Dev. 59:1-10(2001).
-!- FUNCTION: STIMULATES THE SECRETION OF GONADOTROPINS (BY
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Actinopterygii; Neopterygii; Teleostei; Euteleostei;
Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
NCBI_TaxID=8022;
                                                                             TISSUE=Testis;
MEDLINE=21232987; PubMed=11335940;
Uzbekova_S., Ferriure F., Guiguen Y., Bailhache T., Breton
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Pred. No. 2.5;
1; Mismatches 3; Indels
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62 62
62 AA; 7018 MW; E388AAA57E96BBDC CRC64;
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Pred. No. 2.2;
1; Mismatches
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EMBL; AF269107; AAK54678.1; -
EMBL; AF269106; AAK54678.1; -
GO, GO:0005576; C:extracellular; IEA.
GO, GO:0005179; F:hormone activity; IEA.
GO, GO:0007275; P:development; IEA.
InterPro; IPR002012; GnRH.
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RESULT 18
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DT 01-0C
DE Gonad
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01-MMY-2000 (TrENBLrel. 13, Last sequence update)
01-JUN-2003 (TrENBLrel. 24, Last annotation update)
11-JUN-2003 (TrENBLrel. 24, Last annotation update)
Type II gonadorrophin releasing hormone (Gonadoliberin)
Trichosurus vulpecula (Bruh-Rh) (Luliberin).
Trichosurus vulpecula (Bruh-tailed possum).
Eukaryota; Metazoa, Chordata, Craniata; Vertebrata; Euteleostomi;
Mammalia; Metatheria; Diprotodontia; Phalangeridae; Trichosurus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-NOV-1996 (TrEMBLrel. 01, Created) 01-NOV-1996 (TrEMBLrel. 01, Last sequence update) 01-NOV-1996 (TrEMBLrel. 24, Last annotation update) Gonadotropin-releasing hormone precursor (Gonadoliberin) (GnRH) (LH-
                                                                                                                                                                                                                                                      Oncorhynchus nerka (Sockeye salmon).

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Actinopterygii; Neopterygii; Teleostei; Buteleostei;
Protacanthoperygii; Salmoniformes; Salmonidae; Oncorhynchus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE=96020547; PubMed=8546809; Ashiura Y., Kobayashi M., Ashihara M., Suzuki M., Kubokawa K., Yoshiura Y., Kobayashi M., Urano A., Aida K.; "Two different precursor genes for the salmon-type gonadotropin-releasing hormone exist in salmonids."; J. Mol. Endocrinol. 15:1-9(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6; Length 75;
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Pred. No. 3.1;
1; Mismatches
                               75 AA.
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GO; GO:0005576; C:extracellular; IEA.
GO; GO:0005179; F:hormone activity; IEA.
GO; GO:0007275; P:development; IEA.
InterPro; IPR002012; GnRH.
Pf00446; GnRH; 1.
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GO; GO:0005576; C:extracellular; IEA.
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                                                  O9TTV0;
01-MAY-2000 (TrEMBLrel. 13,
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es 6; Conservative
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                                 PRELIMINARY;
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                                 Q9TTV0
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Matches
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RESULT 20
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                                                                                                                                                                                                                                                                                                                                                                          Guilgur L.G., Miranda L.A., Somoza G.M.; "Characterization of three GnRH cDNA sequences in the pejerrey fish
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Actinopterygii, Neopterygii, Teleostei, Euteleostei, Neoteleostei, Acanthomorpha, Acanthopterygii, Percomorpha, Atherinomorpha, Atherinosopha, Atheriniformes, Atherinidae, Atherinidae,
                                                                                                                                                                                               Odontesthes bonariensis.

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;

Enteroptarygii; Neopterygii; Teleostei; Buteleostei; Neoteleostei;

Acanthomorpha; Acanthopterygii; Percomorpha; Atherinomorpha;

Atheriniformes; Atherinoidei; Atherinidae; Atherinopsinae;
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Pred. No. 2.5;
1; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                               Odontesthes bonariensis.";
Submitted (JUN-2003) to the EMBL/GenBank/DDBJ databases.
EMBL; AY316690; AAP84604.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (JUN-2003) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE 68 AA; 7717 MW; FAA92A3AD5211AAA CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                62 AA; 7259 MW; 0D24C3AA0E94083F CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Last sequence update)
Last annotation update)
                                                                                                                                       Last sequence update)
Last annotation update)
                                                                                                                                                                                Gonadotropin-releasing hormone-II (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 68 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-OCT-2003 (TrEMBLrel. 25, Last sequence 01-OCT-2003 (TrEMSBLrel. 25, Last annotati Gonadortopin-releasing hormone (Fragment) odontesthes bonariensis
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01-0cT-2003 (TrEMBLrel. 25, Last seq
01-0cT-2003 (TrEMBLrel. 25, Last ann
                                                                                                                             Created)
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                                                                                                                        01-OCT-2003 (TrEMBLrel. 25, 01-OCT-2003 (TrEMBLrel. 25, 01-OCT-2003 (TrEMBLrel. 25,
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Best Local Similarity 60...
6; Conservative
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Best Local Similarity 60.0
Matches 6; Conservative
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                                                                                          PRELIMINARY;
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     OHWSYGWLPG 15
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                                                                                                                                                                                                                                                                                         Odontesthes.
NCBL_TaxID=219752;
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(GnRH) (LH-RH)

82 AA.

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Lareyre J.J.;

Lareyre J.J.;

"Stage-dependent and alternative splicing of sGRH messengers in rainbow trout testis during spermatogenesis.";

mol. Reprod. Dev. 59:1-10(2001).

-!- FUNCTION: STIMULATES THE SECRETION OF GONADOTROPINS (BY SIMILARITY).

SIMILARITY: BELONGS TO THE GNRH FAMILY.

REMBL; AF10992; AAD43466.1; -..

REMBL; AF209108; AAK4680.1; -..

REMBL; AF209108; AAK4680.1; -..

REMBL; AF209108; AAK4680.1; -..

ROG GO:0005576; C:extracellular; IEA.

GO; GO:0005775; F:hormone activity; IEA.

GO; GO:0005775; B:development; IEA.

ROG GO:0005775; GRRH: 1.

RICEPPO: IPR002012; GRRH: 1.

REMBL; AF30464; GRRH: 1.
                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
MEDLINE=99312119; PubMed=10385393;
Von Schalburg K.R., Sherwood N.M.;
Ven Stablong Agression of gonadotropin-releasing hormone gene differs in brain and gonads in rainbow trout.";
Endocrinology 140:3012-3024(1999).
                                                                                                                                                                                        Oncorhynchus mykiss (Rainbow trout) (Salmo gairdneri).
Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Britanygii, Neopterygii; Teleostei; Euteleostei;
Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
MEDLINE=21232987; PubMed=11335940;
Uzbekova S., Ferriure F.; Guiguen Y., Bailhache T., Breton
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
von Schalburg K.R., Sherwood N.M.;
Submitted (DEC-1998) to the EMBL/GenBank/DDBJ databases.
                                                   01-NOV-1999 (TrEMBLrel. 12, Created)
01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
01-UUN-2003 (TrEMBLrel. 24, Last annotation update)
Gonadotropin-releasing hormone (Gonadoliberin) (GnRi (Luliberin).
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PROSITE; PS00473; GNRH; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
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Q918P9;
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01-DBC-2001 (TrEMBLrel. 19, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
Gonadotropin-releasing hormone precursor II isoform B2 (Gonadotropin-releasing hormone precursor II isoform A) (Gonadotropin-releasing hormone precursor II isoform A) (Gonadotropin-releasing (Luliberin)
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Makaryota, Metazoda, Chordata, Craniata, Vertebrata, Euteleostomi,
Actinopterygii, Neoperrygii, Teleostei, Euteleostei,
Protacanthopterygii, Salmoniformes, Salmonidae, Oncorhynchus.
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Mol. Reprod. Dev. 59:1-10(2001).
--- FUNCTION: STIMULATES THE SECRETION OF GONADOTROPINS (BY
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MEDLINE=21232997; PubMed=11335940;
Uzbekova S., Ferriure F., Guiguen Y., Bailhache T., Breton B.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 40; DB 13; Length 82;
Pred. No. 3.4;
1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                       Score 40; DB 13; Length 82;
Pred. No. 3.4;
1; Mismatches 3; Indels
                                                                                                                                                                                                                                                 GNRH-ASSOCIATED PEPTIDE C640448A521B2B8B CRC64;
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-1- SIMILARITY: BELONGS TO THE GNRH FAMILY.
EMBL; AF269105; AAK54677.1; -
EMBL; AF269104; AAK54677.1; -
EMBL; AF269104; AAK54676.1; -
GO; GO:0005276; C:extracellular; IEA.
GO; GO:0005179; F:hormone activity; IEA.
GO; GO:0002275; P:development; IEA.
GO; GO:0005179; F:hormone activity; IEA.
GO; GO:0007275; P:development; IEA.
InterPro; IPR0C2012; GRRH.
Pfam; PF00446; GRRH; 1.
PROSITE; PS00256; RKH; 1.
PROSITE; PS00473; GRRH; 1.
Amidation; Hormone; Signal.
CHAIN 37 82 GRRH.
GHAIN 37 82 GRRH.
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Pfam; PF00446; GnRH; 1.
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                                                                                                                                                                                                                                                                                                                                                   Local Similarity 60.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
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SEQUENCE 82 AA;
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Bukaryota: Metazca; Chordata; Craniata; Vertebrata; Euteleostomi; Actinopterygii; Neopterygii; Teleostei; Buteleostei; Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
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                                            Score 40; DB 13; Length 82;
Pred. No. 3.4;
1; Mismatches 3; Indels
7595B4FCC65FDFD6 CRC64;
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01-0CT-2000 (TrEMBLrel. 15, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                   82 AA.
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RESULT 23 09W7G1

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POTENTIAL
                         -MAR-2002 (TrEMBLrel, 20, Created)
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60.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pfam; PF00446; GRRH; 1.
PROSITE; PS00473; GNRH; 1.
Amidation; Hormone; Signal.
SIGNAL
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Best Local Similarity
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01-0CT-2000 (TrEMBLrel. 15, Last sequence update)
01-0TN-2003 (TrEMBLrel. 24, Last annotation update)
Pro-9GnR4-1 (Gonadoliberin) (Gonadotropin-releasing hormone) (Luliberin).
Oncorhynchus mykiss (Rainbow trout) (Salmo gairdneri).
Bukaryota, Metazoa, Chordata, Craniata; Vertebrata; Euteleostomi; Actinopterygii; Neopterygii; Teleostei; Buteleostei; Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
NUSI_TAXID=8022;
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                         Ferriere F., Bailhache T., Jego P.; Mooorymochus mykiss sGnHH-II cDNA in the brain."; Submitted (FBS-2000) to the BMBL/GenBank/DDBJ databases.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                80.0%; Score 40; DB 13; Length 82; 60.0%; Pred. No. 3.4; tive 1; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         8053F4F221A0FF08 CRC64;
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                                                                                                                                                                     -!- SIMILARITY: BELONGS TO THE GNRH FAMILY.
GO; GO:0005576; C:extracellular; IEA.
GO; GO:0005179; F:hormone activity: IEA.
GO; GO:0007275; P:development; IEA.
INTERPRO; IFF020215; GRRH;
PROSTE; PS00473; GNRH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SIMILARITY).
-!- SIMILARITY BELONGS TO THE GNRH FAMILY.
EMBL; AF232212; AAF91280.1; -
GO, GO:0005576; C:extracellular; IEA.
GO; GO:0005779; F:hormone activity; IEA.
GO; GO:007775; F:development; IEA.
InterPro; IPR002047; AKH.
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                                                                                                                                                                                                                                                                                                                                                                                                                            Amidation; Hormone.
SEQUENCE 82 AA; 9203 MW;
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Best Local Similarity 60.0.,
Best Local Similarity
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PROSITE; PS00256; AKH; 1.
PROSITE; PS00473; GNRH; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 EHWSXGXXPG 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QHWSYGWLPG 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24 OHWSYGWLPG 33
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                                                                                                                                              SIMILARITY).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE
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Matches
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Q8UW81
ID Q8UW8:
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GONADOTROPIN-RELEASING HORMONE ASSOCIATED
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-UN-2003 (TrEMBLrel. 24, Last annotation update)
Chicken-II type gonadotropin-releasing hormone (Gonadoliberin) (GnRH)
(LAH-RH) (Luliberin).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CHICKEN-II-TYPE GONADOTROPIN-RELEASING
01-MR-2002 (TrEMBLE). 20, Last sequence update)
01-UNJ-2003 (TrEMBLE). 24, Last annotation update)
Chicken-II type gonadotropin-releasing hormone precursor
(Gonadoliberin) (GRMH) (LM-RH) (Luliberin).
Verasper moseri (Barfin flounder).
Verasper moseri (Barfin flounder).
Actinopterygii, Neopterygii, Teleostei, Buteleostei, Batinopterygii, Acanthopoterygii, Percomorpha, Pleuronectiformes, Pleuronectoidei; Pleuronectidae; Verasper.
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Oncorbynchus mykiss (Rainbow trout) (Salmo gairdneri).

Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Actinopterygii, Neopterygii, Teleostei; Euteleostei,
Protacanthopterygii, Salmoniformes; Salmonidae; Oncorhynchus.

NCBI_TaxID=8022;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TISSUB-COVARY)

MEDLINE-20084414; PubMed=10619396;

WEDLINE-20084414; PubMed=10619396;

WEDLINE-20084414; PubMed=10619396;

WEGULATION AND EXPRESSION OF GRRH IN SALMON EMBRYO AND GONAGO.

"Regulation and expression of GRRH in salmon embryo and gonad.";

Mol. Cell. Endocrinol. 157:41-54(1999).

-I-STMILARITY:

SIMILARITY:

BHB.; ARILS973; AAF08687.1;

GO; GO:0005576; C:extracellular; IEA.

GO; GO:0005179; F:hormone activity; IEA.
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Pred. No. 3.5;
1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Submitted (JUL-2001) to the EMBL/GenBank/DDBJ databases.-!- FUNCTION: STIMULATES THE SECRETION OF GONADOTROPINS SIMILARITY: BELONGS TO THE GNRH FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PEPTIDE.
73B102A23528AA02 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL, AB066359; BAB83983.1; -. GO, GO:0005576; C:extracellular; IEA. GO; GO:0005179; F:hormone activity; IEA. GO:0007275; P:development; IEA. Interpro; IPR002012; GRRH.
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1 EHWSXGXXPG 10
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Matches 6; Conser
                                         SEQUENCE FROM N.A.
NCBI_TaxID=7955;
                                                                                                                                                               SIMILARITY)
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QBUUKS
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                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ebersole T.J., Goetz F.W., Boyd S.K.;
"Cloning of chicken II (cII) GnRH cDNA from the brain of a caecilian amphibian, Typhlonectes natans.";
Submitted (JUL-1999) to the EMBL/GenBank/DDBJ databases.
-i- FUNCTION: STIMULATES THE SECRETION OF GONADOTROPINS (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
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Eukaryota: Metazoa: Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
Cyprinidae; Danio.
                                                                                                                                                                                                                                                                                                                                                                                                          U-MAY-2000 (TYEMBLrel. 13, Created)
01-MAY-2000 (TYEMBLrel. 13, Last sequence update)
01-MAY-2003 (TYEMBLrel. 13, Last sequence update)
Gonadotropin-releasing hormone II precursor (Gonadoliberin) (GRH)
(IH-RH) (Luliberin).

(IM-RH) (Luliberin).

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Amphibia; Gymnophiona; Caeciliidae; Typhlonectes.
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01-JTM-2002 (TrEMBLrel. 21, Last sequence update)
01-JTM-2003 (TrEMBLrel. 24, Last annotation update)
CII gonadorropin releasing hormone (Gonadoliberin) (GnRH) (LH-RH)
(Luliberin).
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GONADOTROPIN-RELEASING HORMONE
                                                                                                                                           Score 40; DB 13; Length 86; Pred. No. 3.5; 3; Indels 1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 40; DB 13; Length 86;
Pred. No. 3.5;
1; Mismatches 3; Indels
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                                                                                                    D6F0A2FD4BDFC257 CRC64;
                                                                                                                                                                                                                                                                                                                                                                          86 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL; AF167558; AAD48032.1; - SIMILARITY: BELONGS TO THE GNRH FAMILY. EMBL; AF167558; AAD48032.1; - GO; GO:0005576; C:extracellular; IEA. GO; GO:0007275; P:development; IEA. InterPro; IPR002012; GnRH.
    GO; GO:0007275; P:development; IEA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   86 AA; 9788 MW;
                                                                                                                                               80.08;
                                                                                                                                                                   60.0%;
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                                                                                                      86 AA; 9811 MW;
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                       InterPro, IPR002012; GnRH. Pfam; PF00446; GnRH; 1. PROSITE; PS00473; GNRH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity 60.0
                                                                                                                                                                 Best Local Similarity 60.0
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                          PRELIMINARY;
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                                                                                                                                                                                                                                                                     25 QHWSHGWYPG 34
                                                                                     Amidation; Hormone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NCBI_TaxID=8456;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TISSUE=Brain;
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                                                                                                      SEQUENCE
                                                                                                                                               Query Match
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Q9PW69;
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109 PW69.
100 PW69.
100 PW69.
101 PWF
101 PW
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Q80FU8
LD Q80FU8
AC Q80FU8
DT 01-JU
DT 01-JU
DD CIII 9
DB CIII 9
DB CIII 9
DB CIII 9
CO Butan
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Whitlock K.E., Gopinath A., Tseng A.L., Boyce M.L.;
"Characterization of gonadotropin releasing hormone (GnRH) expression in the juvenile zebrafish Danio rerio.
Submitted (APR-2002) to the EMBL/GenBank/DDBJ databases.
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Actinopterygii; Neopterygii; Teleostei; Osteoglossomorpha;
Osteoglossiformes; Osteoglossidae; Scleropages.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
01-UTV-2003 (TrEMBLrel. 24, Last annotation update)
Prepro-chicken-II-Type gonadorropin-releasing hormone precursor (Gonadoliberin) (GRRH) (LH-RH) (Luliberin).
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Pred. No. 3.5;
1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 40; DB 13; Length 86;
Pred. No. 3.5;
1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pfam; PF00446; GnRH; 1.
SNOSITE; PS00473; GnRH; 1.
Amidation; Hornone.
SEQUENCE 86 AA; 9802 MW; 27F5A5CCDC4026D8 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HORMONE.
F7A4643016307D05 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   86 AA.
                                                                                                                                                                                                                                                                       -!- SIMILARITY: BELONGS TO THE GNRH FAMILY.
EMBL, AX094357; AAM15717.1; --
GO; GO:0005576; C:extracellular; IEA.
GO; GO:0005179; F:hormone activity; IEA.
GO; GO:000775; P:development; IEA.
Interpro; IPR002012; GnRH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QBUUK5;
01-MAR-2002 (TrEMBLrel. 20, Created)
01-MAR-2002 (TrEMBLrel. 20, Last Seg
01-UUN-2003 (TrEMBLrel. 24, Last ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRT;
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TISSUE=Brain;
MEDLINE=21560666; PubMed=11703078;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       80.0%;
60.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    80.0%;
larity 60.0%;
Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 60.0
Matches 6; Conservative
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SEQUENCE FROM N.A. Li S.F., Hu W., Wang Y.P., Zhu Z.Y.; Li S.F., Hu W., Wang Y.P., Zhu Z.Y.; "Isolation and identification of two differing sGnRH from common carp
                                                                                                                                                                                                                                                                                                                                                                                                                                    Cyprinus carpio (Common carp).

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
Cyprinidae; Cyprinus.
NCBI_TaxID=7962;
                          GONADOTROPIN-RELEASING HORMONE TYPE-II.
GONADOTROPIN-RELEASING HORMONE TYPE-II
ASSOCIATED PEPTIDE.
9DAIB3ACBCEC86A4 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CHICKEN-II-TYPE GONADOTROPIN-RELEASING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CHICKEN-II-TYPE GONADOTROPIN-RELEASING HORMONE ASSOCIATED PEPTIDE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
Li S.F., Hu W., Wang Y.P., Zhu Z.Y.;
Gene clone and promoter functional analysis of cGnRH-II.";
Submitted (FBB-2003) to the EMBL/GenBank/DDBJ databases.
EMBL; AY189961; AA039753.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 40; DB 13; Length 86;
Pred. No. 3.5;
1; Mismatches 3; Indels
                                                                                                               Score 40; DB 13; Length 86; Pred. No. 3.5; 1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                  01-07N-2003 (TrEMBLrel. 24, Created)
01-07N-2003 (TrEMBLrel. 24, Last sequence update)
01-07T-2003 (TrEMBLrel. 25, Last annocation update)
Chicken-II-type gonadotropin-releasing hormone precursor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (Cyprinus carpio).";
Submitted (DEC-2002) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6F19886E2B85DB61 CRC64;
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(TrEMBLrel. 13, Last sequence update)
(TrEMBLrel. 24, Last annotation update)
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                                                                                                                                                                                                                                                                                                                  86 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GO; GO:0005576; C:extracellular; IEA.
GO; GO:0005179; F:hormone activity; IEA.
GO; GO:0007275; F:development; IEA.
InterPro; IPR:02012; GRH.
PFam; PF:00446; GRNH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           POTENTIAL
               POTENTIAL
                                                                                                                                                                                                                                                                                                                  PRT;
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60.0%;
                                                                                                                     80.0%;
                                                                                   9792 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL; AY246698; AAO89186.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                86 AA; 9917 MW;
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                                                                                                                                                     6; Conservative
                                                                                                                                                                                                                                                                                                                    PRELIMINARY;
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                                                                                                                                                                                         1 EHWSXGXXPG 10
                                                                                                                                                                                                                           25 QHWSHGWYPG 34
                 25 8
34 8
86 8
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Best Local Similarity
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Best Local Similarity
Matches 6; Conserv
                                                                                     86 AA;
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35
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01-MAY-2000
01-MAY-2000
01-JUN-2003
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SIGNAL
Signal.
SIGNAL
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                                  CHAIN
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Steven C., Ijiri S., Zohar Y.;
Steven C., Ijiri S., Zohar Y.;
"Characterization of the gonadotropin-releasing hormone system in the zebrafish (Danio rerio).";
Submitted (MAY-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; AF511531; AAM43951.1; -.
                                                                                                                                                                                                                                                                                                                                   EEQUENCE FROM N.A.

Li S.F., Hu W., Wang Y.P., Zhu Z.Y.;

"Genetics, coloning and promoter function analysis of the GnRH gene.";

"Genetics, coloning and promoter function analysis of the GnRH gene.";

Submitted (DEC-2002) to the EMBL/GenBank/DDBJ databases.

EMBL, AY147400, AAN64351.3; -.

GO; GO:0005576; C:extracellular; IEA.

GO; GO:0005179; F:hormone activity; IEA.

InterPro; IPR002012; GnRH.
                                                                                                                                      01-MAR.2003 (TrEMBLrel. 23, Created)
01-MAR.2003 (TrEMBLrel. 23, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Chicken-II-type gonadotropin-releasing hormone precursor.
Cyprinus carpio (Common carp).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi, Actinopterygii, Neopterygii, Teleostei; Ostariophysi; Cypriniformes, Cyprinidae; Cyprinus.
NCEL TaxID=7962;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-OCT-2002 (TrEMBLrel. 22, Created)
01-OCT-2002 (TrEMBLrel. 24, Last sequence update)
01-OCT-2003 (TrEMBLrel. 24, Last annotation update)
01-UN-2003 (TrEMBLrel. 24, Last annotation update)
Gonadotropin-releasing hormone type-II precursor.
Brachydanio rerio (Zebrafish) (Danio rerio).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
Cyprinidae; Danio.
NCBI_TaxID=7955;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CHICKEN-II-TYPE GONADOTROPIN-RELEASING
HORMONE.
GGNRH-II ASSOCIATED PEPTIDE.
AA34E0B17AD1DAS5 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
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                                                                                                                         86 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; AFS11532; AAP34360.1; -. GO, GO; O0006556; C: extracellular; IEA. GO; GO: 0000576; C: extracellular; IEA. GO; GO: 0007275; P: development; IEA. InterPro: IRPGO2012; GRR. InterPro: IRPGO3012; GRR. PFOM46; GRR. 1. PPGMR: 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         POTENTIAL
                                                                                                                         PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               80.0%;
60.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9959 MM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pfam; PF00446; GnRH; 1.
PROSITE; PS00473; GNRH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     6; Conservative
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                                                                                                                         PRELIMINARY;
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25 QHWSHGWYPG 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24
34
 1 EHWSXGXXPG 10
                      OHWSHGWYPG 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            35
86 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity
Matches 6; Conserv
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                                                                                                                       QBAWI6
QBAWI6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Signal.
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Q8AWI6
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Score 40, DB 13, Length 88; Pred. No. 3.6; 1; Mismatches 3; Indels

F7EB868C2FBDF19F CRC64;

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GO, GO:0007275; P:development; IEA.
InterPro; IPRO02012; GRH.
Elam; PF00446; GRH; 1.
PROSITE; PS00473; GRH; 1.
Amidation; Hormone.
                                                                                             80.08;
                                                                        88 AA; 9788 MW;
                                                                                                          Local Similarity 60.0
nes 6; Conservative
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24 QHWSYGWLPG 33
                                                                                                                                              1 EHWSXGXXPG 10
                                                                                                                                                                   24 OHWSYGWLPG 33
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     90 AA;
                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                          NCBI_TaxID=98923;
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                                                           NON TER
SEQUENCE
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QBUWB2;
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                                                                                                                Okubo K., Suetake H., Aida K.; "Expression of two gonadotropin-releasing hormone (GnRH) precursor genes in various tissues of the Japanese eel and evolution of GnRH."; Zool. Sci. 16:471-478(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Actinopterygii; Neopterygii; Teleostei; Buteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Percoidei;
Sparidae; Sparus
             hormone) (LH-RH) (Luliberin).
Anguilla japonica (Japanese eel).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Anguilliformes; Anguillidae;
                                                                                                                                                                                            Okubo K., Suetake H., Aida K.;
"A splicing variant for the prepro-mammalian gonadotropin-releasing hormone (prepro-mGnRH) mRNA is present in the brain and various peripheral tissues of the Japanese eel.";
Zool. Sci. 16:645-651(1999).
-!- FUNCTION: STIMULATES THE SECRETION OF GONADOTROPINS (BY
   Prepro-cGnRH-II precursor (Gonadoliberin) (Gonadotropin-releasing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nabissi M.;
Submitted (FEB-1998) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: STIMULATES THE SECRETION OF GONADOTROPINS (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 40, DB 13; Length 87;
Pred. No. 3.6;
1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                              CGNRH-II,
GNRH ASSOCIATED PEPTIDE.
6B24DE452338B48A CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-WAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              88 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SIMILARITY).
-!- SIMILARITY: BELONGS TO THE GNRH FAMILY
                                                                                                                                                                                                                                                                            -i- SIMILARITY: BELONGS TO THE GNRH FAMILY.
EMBL, AB026990; BAAB2609.1, -
GO, GO:0005576; C:extracellular; IEA.
GO, GO:0005779; F:hormone activity; IEA.
GO; GO:000775; P:development; IEA.
InterPro, IPR002012; GnRH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL, AF046799; AAD02425.1; -. GO: 00:005576; C:extracellular; IEA. GO: 00:005179; F:hormone activity; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                  POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (Luliberin) (Fragment).
Sparus aurata (Gilthead sea bream)
                                                                                                                                                                                                                                                                                                                                                                                                                                                              80.08;
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                                                                                                                                                                                                                                                                                                                                                                Pfam; PF00446; GnRH; 1.
PROSITE; PS00473; GNRH; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
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                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                        [2]
SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=8175;
                                                                                                                                                                                                                                                                    SIMILARITY).
                                                               Anguilla.
NCBI_TaxID=7937;
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                                                                                                           rissum=Brain;
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9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q9PSY9
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                                                                                                                                                                                                                                                                                                                                              "Melecular cloning of three cDNAs encoding GnRH in the brain of barfin flounder.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HORMONE.
GONADOTROPIN-RELEASING HORMONE ASSOCIATED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                      01-MAR-2002 (TrEMBLrel. 20, Created)
01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
01-MAR-2003 (TrEMBLrel. 24, Last annotation update)
Salmon-type gonadotropin-releasing hormone precursor (Gonadoliberin)
(GARH) (LH-RH) (Luliberin)
Verasper moseri (Barfin flounder)
                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Actinopterygii; Neopterygii; Teleostei; Buteleostei; Neoteleostei; Acanthomorpha; Acanthopterygii; Percomorpha; Pleuronectiformes; Pleuronectoidai; Pleuronectidae; Verasper.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             POTENTIAL.
SALMON-TYPE GONADOTROPIN-RELEASING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                               (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 40; DB 13; Length 90; Pred. No. 3.7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                Submitted (JUL-2001) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SBFD01586CEABC9D CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-WAR-2003 (TrEMBLrel. 23, Created)
01-WAR-2003 (TrEMBLrel. 23, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gonadotropin-releasing hormone III precursor.
90 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         90 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         SIMILARITY).

-!- SIMILARITY: BELONGS TO THE GNRH FAMILY.
EMBL, AB066358; BAB83982.1; --
GO; 0005576; C:extracellular; IEA.
GO; QC:0005179; F:hormone activity; IEA.
GO; GO:000775; P:development; IEA.
InterPro; IPR002012; GnRH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10090 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           80.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PROSITE; PS00473; GNRH; 1.
Amidation; Hormone; Signal
SIGNAL 1 23
CHAIN 24 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity 60.0
  PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OSAWF6
ID OS
DT OJ
DT OJ
DE OG
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GnRH-associated peptide.
B3637E3839A53A4E CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Thesis (1997), Department of Food Science, Agricultural University of Norway, As, Norway
                                                                                                                                                                                                                                                                                                                                                                           94 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL, AJ304429, CAC18539.1; -- CEMBL, AF490354, AAL99294.1; -- CEMBL, OCCO005576; C: CEXTRACELLULAY, IEA. COC. GO: 00:0005179; F. Hormone activity; IEA. GO: GO:0007275; P: development; IEA. InterPro; IPR002012; GnEH.
                                                                                                                                                                                                                                                                                                                                                                              PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           94 AA; 10576 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              80.08;
     73
10083 MW;
                                                                                  80.0%;
60.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        InterPro; trnver-1.
Pran; PF00446; GnRH; 1.
PROSITE; PS00473; GNRH; 1.
Amidation; Hormone; Signal.
                                                                                  Query Match
Best Local Similarity 60.0
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                PRELIMINARY;
                                                                                                                                                                                        1 EHWSXGXXPG 10
                                                                                                                                                                                                                                           24 QHWSYGWLPG 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
TISSUE=Brain;
     47
90 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              rerio) GnRH Gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (Luliberin).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IISSUE=Brain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alestrom P.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Husebye H.;
        CHAIN
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                              Q9DDDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SGNRH
                                                                                                                                                                                                                                                                                                                          RESULT 39
Q9DDD8
                                                                                                                                                                                                                                                                                                                                                                                   SOTT THE WARRENCE COURT THE REAL TO SEE THE SEARCH SEE THE SEARCH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Actinopterygii; Neopterygii; Teleostei; Euteleostemi; Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Labroidei; Cichlidae; Oreochromis.

NCBL TaxID=8127;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Orecchromis niloticus (Nile tilapia) (Tilapia nilotica).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata; Euteleostomi;
Actinopterygii, Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Perciformas; Labroidei;
Cichlidae; Oreochromis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sato H., Sakuma Y., Parhar I.S.; "Molecular cloning of three kinds of GnRH genes and 5' untranslated "Molecular cloning of three kinds of Greochromis in Lilapia (Oreochromis miloticus)."; Submitted (MAR-2003) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Parhar I.S., Ogawa S., Sakuma Y.;
"Molecular cloning of tilapia (Oreochromis niloticus) GnRH cDNA.";
"Molecular cloning of tilapia (Oreochromis niloticus) GnRH cDNA.";
Submitted (FEB-2003) to the EMBL/GenBank/DDBJ databases.
EMBL; AB104863; BAC56515.1;
GO; GO:0005576; C:extracellular; IEA.
GO; GO:0005779; F:hormone activity; IEA.
GO; GO:0007275; P:development; IEA.
InterPro; IPR002012; GnRH.
PF00446; GnRH; I.
                                                                                                                                                                                                                          SEQUENCE FROM N.A.
Molina A.I., Pellegrini E., Baihache T., Martial J.A., Muller M.;
"Cloning and brain expression analysis of the tilapia salmon type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             salmon-type gonadotropin-releasing
hormone.
GnRH-associated peptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 40; DB 13; Length 90;
Pred. No. 3.7;
1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                            GnRH.";
Submitted (OCT-2002) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B3637E3839A53A4E CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-JUN-2003 (TrEMBLrel. 24, Last sequence update) 01-OCT-2003 (TrEMBLrel. 25, Last annotation update) Salmon-type gonadotropin-releasing hormone precursor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-JUN-2003 (TrEMBLrel. 24, Created)
01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       90 AA
                                                                                                                                                                                                                                                                                                                                                       EMBL; AY167999; AA011648.1; ...

GO; GO:0005576; C:extracallular; IEA.

GO; GO:0005779; F:hormone activity; IEA.

GO; GO:0007275; P:development; IEA.

InterPro; IPROG102; GnRH.

Pfam; PF00446; GnRH; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 33
90 AA; 10083 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   80.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PROSITE; PS00473; GNRH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 60.0
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 EHWSXGXXPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24 OHWSYGWLPG 33
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NCBI_TaxID=8128;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ignal
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Signal
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Q7ZT00
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SEQUENCE FROM N.A. Torgersen J., Nourizadeh-Lillabadi R., Husebye H., Alestrom P.; Torgersen J., Nourizadeh-Lillabadi R., Husebye H., Alestrom P.; "In Silico and In Situ Characterization of the Zebrafish (Danio rerio)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Brachydanio rerio (Zebrafish) (Danio rerio).
Bukaryota; Metazoa; Chordata; Cranlata; Vertebrata; Buteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
Cyprinidae; Danio.
NCBI_TaxID=7955;
                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-MAR-2001 (TrEMBLrel. 16, Created)
01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-MAR-2003 (TrEMBLrel. 24, Last annocation update)
Gonadotropin releasing hormone precursor (Gonadoliberin) (GRRH) (LH-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Husebye H.; "Characterization and Functional Studies of the Zebrafish (Danio rerio) GnRH Gene.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Characterization and Functional Studies of the Zebrafish (Danio
                                                                          ;
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GNRH ASSOCIATED PEPTIDE (GAP).
D0101FF655A81726 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 40; DB 13; Length 94; Pred. No. 3.9;
Score 40; DB 13; Length 90;
Pred. No. 3.7;
1; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Submitted (DEC-2000) to the EMBL/GenBank/DDBJ databases.
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Local Similarity 60.0
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                                                                                                                                                                                                                                                                                                                                                                                   1 EHWSXGXXPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                      24 OHWSYGWLPG 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 EHWSXGXXPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24 OHWSYGWLPG 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       08JHC3
08JHC3;
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                                                                                                                                                                                                                                                                                                                                                Matches
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ID OC
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01-WAR-2001 (TrEMBLrel. 16, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
83almon-type gonadotropin-releasing hormone (Gonadoliberin) (GnEH) (LH-RH) (Luliberin).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
 Gaps
                                                                                                                                                                                                                                                                                                      Carassius auratus (Goldfish).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
Cyprinidae; Carassius.
                                                                                                                                                                                                                                                                                                                                                                                                                                Scleropages jardinii (Australian bonytongue).
Bukaryota; Metezzoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Actinopterygii; Neopterygii; Teleostei; Osteoglossomorpha;
Osteoglossiformes; Osteoglossadae; Scleropages.
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01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
01-WAR-2003 (TrEMBLrel. 24, Last annotation update)
Prepro-salmon-type gonadotropin-releasing hormone precursor (Gonadoliberin) (GnRH) (LH-RH) (Luliberin)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 80.0%; Score 40; DB 13; Length 94; 60.0%; Pred. No. 3.9; tive 1; Mismatches 3; Indels
 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Amidation; Hormone.
SEQUENCE 94 AA; 10545 MW; IEEA5ED54EC0468B CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       94 AA.
                                                                                                                                                                 94 AA.
1; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TISSUE=Brain;
MEDLINE=21560666; PubMed=11703078;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity 60.0
6, Conservative
                                                                                                                                                             PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
                                 1 EHWSXGXXPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 EHWSXGXXPG 10
                                                                    24 QHWSYGWLPG 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24 OHWSYGWLPG 33
                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NCBI TaxID=113541;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                             Q9DEH5
                                                                                                                                                                                                                                                                     RH) (L
SGNRH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QBUUKE
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OBUTK
AC CRUTK
AC CRUTK
DT 01-MA
DT 01
Matches
                                                                                                                       RESULT 40
                                                                                                                                           Q9DEH5
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CJ-WAR-2001 (TrEMBLrel. 16, Created)
01-WAR-2001 (TrEMBLrel. 16, Last sequence update)
01-ND-2003 (TrEMBLrel. 24, Last annotation update)
83-Unn-type gonadotropin-releasing hormone (Gonadoliberin) (GnRH) (LH-RH) (Luliberin).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Carassius auratus (Goldfish).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
Cyprinidae; Carassius.
NCBI_TaxID=7957;
                                                                                                                                                                                                                                                                                                                                                                               POTENTIAL. SALMON-TYPE GONADOTROPIN-RELEASING
Gen. Comp. Endocrinol. 124:125-133(2001).

-!- FUNCTION: STIMULATES THE SECRETION OF GONADOTROPINS (BY SIMILARITY: SELONGS TO THE GNEH FAMILY.

-!- SIMILARITY: BELONGS TO THE GNEH FAMILY.

R GO; GO:0005179; F: Denome activity; IEA.

R GO; GO:0005179; F: Denome activity; IEA.

R GO; GO:0007275; P: development; IEA.

R Interpro; IPRO2011; GRIH.

R PROSITE; PS00473; GNEH; 1.

R PROSITE; PS00473; GNEH; 1.

R Amidation; Hormone; Sigmal.

T SIGNAL

T CHAIN

Z 4 36

SALMON-TYPE GONADOTROPIN-RELEASING
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Suetake H.;

"Two salmon goradotropin-releasing hormone genes and their

"two salmon gorasotropin in the goldfish Carassius auratus.";

Risheries Sci. 66:49-57(2000)

-!- PONCTION: SIIMULATES THE SECRETION OF GONADOTROPINS (BY
SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 / Match 80.0%; Score 40; DB 13; Length 94; Local Similarity 60.0%; Pred. No. 3.9; les 6; Conservative 1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     80.0%; Score 40; DB 13; Length 94; 60.0%; Pred. No. 3.9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            7790050E92FA0D66 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -!. SIMILARITY: BELONGS TO THE GNRH FAMILY.
EMBL; AB01727; BAB18904.1; -.
GO; GO:0005575; C:extracellular; IEA.
GO; GO:0005179; Fibormone activity; IEA.
GO; GO:0007275; P:development; IEA.
InterPro: IRF002012; GnRH.
PROSITE; PS00473; GNRH; 1.
PROSITE; PS00473; GNRH; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                  HORMONE
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94 AA.

PRT;

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01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Salmon-type gonadotropin-releasing hormone preproprotein
                                                                                                                                                                                                                                              24, Created)
                                                                                                                                                                                     PRELIMINARY;
                                                                                                                                                                                                                                                     (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 EHWSXGXXPG 10
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24 QHWSYGWLPG 33
              24 QHWSYGWLPG 33
                                                                                                                                                                                                                     2801D6;
01-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE
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Q801D5
                                                                                                       RESULT 45
0801D
AC 0801D
DAC 0801D
DT 01-07
DT 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
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01-OCT-2002 (TrEMBLrel. 22, Created)
01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
Salmon-type gonadotropin-releasing hormone.
Cyprinus carpio (Common carp).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Actinopterygii, Neopterygii, Teleostei; Ostariophysi; Cypriniformes;
Oyprindae, Cyprinus.
NCBL TaxID=7962;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cyprinus carpio (Common carp).

Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
Cyprinuse; Cyprinus.

NCBI_TaxID=7962;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      POTENTIAL.
SALMON-TYPE GONADOTROPIN-RELEASING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SALMON-TYPE GONADOTROPIN-RELEASING HORMONE ASSOCIATED PEPTIDE. COCFAC6980BFBD36 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
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                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.

Li S., Hu W., Wang Y., Zhu Z.;

Li S., Hu W., Wang Y., Zhu Z.;

"Gene clone and promoter functional analysis of sGnKH.";

"Gene clone and promoter functional analysis of sGnKH.";

"Gene clone and promoter functional analysis of sGnKH.";

"Gongo (JUN-2002) to the EMBL/GenBank/DDBJ databases.

EMBL; AF521130; AAM77660.1; -..

GO; GO:0005179; F:hormone activity; IEA.

GO; GO:0007275; F:hormone activity; IEA.

R DRO20725; F:development; IEA.

Fram, PRO0446; GnRH.

R PROSITE; PS00443; GNRH; 1.

SEQUENCE 94 AA; 10445 MW; C3DD3F7C2A852A80 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 13; Length 94;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 40; DB 13; Length 94;
Pred. No. 3.9;
1; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (Cyptinus carpio)...;
Submitted (DEC-2002) to the EMBL/GenBank/DDBJ databases...
EMBL, AY189960; AA039752.1;
GO; GO:000576; C:extracellular; IEA...
GO; GO:0005179; F:hormone activity; IEA...
GO; GO:000775; P:development; IEA...
InterPro; IFR002012; GNRH...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Salmon-type gonadotropin-releasing hormone precursor.
GNRH.
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01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
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Pred. No. 3.9;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           94 AA.
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60.0%;
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Best Local Similarity 60.0.
Best Local 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 60..
6; Conservative
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SIGNAL
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2804C1
DD 0204C1
DT 01-JU
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Li S.F., Hu W., Wang Y.P., Zhu Z.Y.;

Li S.F., Hu W., Wang Y.P., Zhu Z.Y.;

"Isolation of two different sGnRH precursor mRNAs and expression assay in dissected brain regions in the common carp.";

Submitted (FEB-2003) to the EMBL/Genbank/DDBJ databases.

BNBL; AN186622; AN039976.2;

GO, GO:0005179; F:hormone activity; IEA.

GO, GO:0005179; F:hormone activity; IEA.

GO, GO:0007129; P:hormone activity; IEA.

InterPro; IPR002012; GNRH.

FF00446; GNRH; 1.
                                                                                                                                                SEQUENCE FROM N.A.

Li S.F., Hu W., Wang Y.P., Zhu Z.Y.;

Li Salation of two different sGRH precursor mRNAs and expression assay

in dissected brain regions in the common carp.";

Submitted (FEB-2003) to the EMBL/GenBank/DDBJ databases.

EMBL, ANIS6621; AAO39975.2;

GO, GO:0005776; Cextracellular, IEA.

GO, GO:0005779; Piormone activity; IEA.

GO: GO:0002775; Pidrelopment; IEA.

InterPro; IPRO2012; GRH.

Pfam; PPO0446; GRH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cyprinus carpio (Common carp).

Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi;

Actinopterygii, Neopterygii; Teleostei; Ostariophysi; Cypriniformes;

Cyprinidae; Cyprinus.

NCBI_TaxID=7962;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
precursor.
Cyprinus carpio (Common carp).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Cypriniformes;
Cyprinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
Cyprinidae; Cyprinus.
NCBI_TaxID=7962;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 40; DB 13; Length 94; Pred. No. 3.9; 1; Mismatches 3; Indels
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COCFAC6AB08CBD36 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                           1 23 Potential.
94 AA, 10574 MW; 131D9B82247E7E85 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             94 AA
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Q801D5;
01-JUN-2003 (TrEMBLrel. 24, Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 23
AA; 10708 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60.08;
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PROSITE; PS00473; GNRH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  80.0
Best Local Similarity 60.0
Matches 6, Conservative
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SEQUENCE FROM N.A.
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-!- FUNCTION: STIMULATES THE SECRETION OF GONADOTROPINS (BY
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                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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Mammalia, Butheria, Primates, Catarrhini, Cercopithecidae,
Cercopithecinae, Macaca.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Macaca mulatta (Rhesus macaque).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Cercopithecidae;
Cercopithecinae; Macaca.
                                                                                                                                                                                                                                                                                           01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2003 (TrEMBLrel. 24, Last annotation update)
Chicken luteinizing hormone-releasing hormone II (Gonadoliberin)
(Gonadotropin-releasing hormone) (GnRH) (LH-RH) (Luliberin)
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01-MAY-1999 (TrEMBLrel. 10, Last sequence update)
01-MAY-2003 (TrEMBLrel. 24, Last amoctation update)
01-UTN-2003 (TrEMBLrel. 24, Last amoctation update)
Gonadotropin-releasing hormone II (Gonadoliberin) (GnRH) (LH-RH)
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                 Score 40; DB 13; Length 94; Pred. No. 3.9; 1; Mismatches 3; Indels
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EMBL; AF104307; AAD13775.1; --
GO; GO:0005576; C:extracellular; IEA.
GO; GO:0005179; F:hormone activity; IEA.
GO; GO:0007275; P:development; IEA.
InterPro; IPR002012; GRRH.
PROMAFOR GNRH; 1.
PROSITE; PS00473; GNRH; 1.
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                        80.0%;
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                                                                Conservative
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Matches 6, Conserv
                        Query Match
Best Local Similarity
Matches 6; Conser
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GNRH2.
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Q9TSI3
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"Biosynthesis of the ansamycin antibiotic rifamycin: deductions from the molecular analysis of the rif biosynthetic gene cluster of Amycolatopsis mediterrane; 8699."; Chem. Biol. 5:69-79(1998).
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MEDLINE=98165773; PubMed=9497318;
Kim C.G., Yu T.W., Fryhle C.B., Handa S., Floss H.G.;
"3-Amino-5-hydroxybenzoic acid synthase, the terminal enzyme in the formation of the precursor of mC7N units in rifamycin and related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Formation of 3-amino-5-hydroxy-benzoic acid, the precursor of mC7N units in ansamycin antibiotics, by a new variant of the shikimate
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Kim C.G., Kirschning A., Bergon P., Ahn Y., Wang J.J., Shibuya M.,
Floss H.G.;
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-!- SIMILARITY: BELONGS TO THE LUXR/UHPA FAMILY OF TRANSCRIPTIONAL REGULATORS.
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Theus macaque (Abstract #632.18).";

Abstr. - Soc. Neurosci. 24:1609-1609 (1998).

C. -! FUNCTION: STIMULATES THE SECRETION OF GONADOTROPINS (BY SIMILARITY).

C. -! SIMILARITY: BELONGS TO THE GNRH FAMILY.

R MADISTRY: BELONGS TO THE GNRH FAMILY.

R GO; GO:0005179; F. Dormone activity; IEA.

R GO; GO:0005179; F. Dormone activity; IEA.

R GO; GO:0007275; P: development; IEA.

R Theerro: IPRO02012; GnrH.

R PROSITE; PS00446; GnrH; 1.

R Amidation; Hormone.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Actinosymnema pretiosum (subsp. auranticum).
Bacteria; Actinobacteria; Actinobacteridae; Actinomycetales;
Pseudonocardineae; Actinosymnemataceae; Actinosymnema.
NCBI_TaxID=42198;
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01.AUG-1998 (TrEMBLrel. 07, Last sequence update)
01.OCT-2003 (TrEMBLrel. 25, Last annotation update)
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Pred. No. 4.8;
1; Mismatches
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MEDLINE=98174059; PubMed=9512878;
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60.0%;
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Matches 6, Conservative
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A Wan Sluys M.A. de Oliveira M.C., Monteiro-Vitorello C.B., Moon D.H.,
A Wan Sluys M.A., de Oliveira M.C., Monteiro-Vitorello C.B., Moon D.H.,
A Takita M.A., Lemos E.G.M., Machado M.A., Ferro M.I.T., da Silva F.R.,
A Goldman M.H.S., Goldman G.H., Lemos M.V.F., El-Dorry H., Tsais S.M.,
Carrer H., Carraro D.M., de Oliveira R.C., Nunes L.R., Siqueira W.J.,
Coutinho L.L., Kimura E.T., Ferro E.S., Harakava R., Kuramae E.E.,
Marino C.L., Giglioti E., Abreu I.L., Alves L.M.C., do Amaral A.M.,
Baia G.S., Blanco S.R., Brito M.S., Cannavan F.S., Celestino A.V.,
A da Cunha A.F., Fenile R.C., Ferro J.A., Formighieri E.P., Kishi L.T.,
A cloni S.G., Oliveira A.R., Rosa V.E. Jr., Sassaki F.T., Sena J.A.D.,
Civerolo E.L., Simpson A.J.G., Almeida M.N., Jr., Sena J.A.D.,
Kitajima J.P., Simpson A.J.G., Almeida N.F. Jr., Schubal J.C.,
Kitajima J.P.,
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EMBL, AE012556, A0028844.1;

GO; GO:0004190; F:aspartic-type endopeptidase activity; IEA.

GO; GO:0004190; F:cysteine-type endopeptidase activity; IEA.

GO; GO:0008233; F:peptidase activity; IEA.

GO; GO:0008233; F:peptidase activity; IEA.

GO; GO:0008289; F:subtilase activity; IEA.

InterPro; IPR001969; Approcease_AS.

InterPro; IPR001969; Autotransporter.

InterPro; IPR000199; SHprot_acsite.

Pfam; PF00197; Autotransporter.

Pfam; PF00197; Autotransporter.

Pfam; PF00197; Autotransporter.

Pfam; PF00182; Peptidase_S8:

PFAM; PF00182; PEPTIDETER:

PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; PFAM; 
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Bacteria; Proteobacteria; Gammaproteobacteria; Xanthomonadales;
Xanthomonadaceae; Xylella.
NCBI_TaxID=183190;
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                                                                                 PRINTS; PR00038; HTHLUXR.
ProDom; PD000307; HTH LuxR; 1.
SMART; SM00421; HTH LUXR; 1.
PROSITE; PS00622; HTH LUXR; FAMILY; 1.
DNA-binding; Transcription; Transcription regulation.
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01-tUN-2003 (TrEMBLrel. 24, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
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InterPro; IPR008941; TPR-like.
Pfam; PF00196; GerE; 1.
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80.0%; Score 40; DB 16; Length 909;

Query Match

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Best Local Similarity 60.0%; Pred. No. 42;
Matches 6; Conservative 0; Mismatches 4; Indels 0; Gaps
Qy 1 EHWSXGXXPG 10
Db 92 EHWPGGIAPG 101
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| US-09-100-4145-58 Sequence 30 US-09-100-4145-62 Sequence 62                           | US-09-303-323-57 Sequence 57                | US-09-303-323-58 Sequence 52                                                                                                            | US-09-770-014-57 Sequence 57                                                                                                                                               | US-09-770-014-58 sequence 58                                                                                                                                                                                                                                                                                                                               | US-08-446-692-26 Sequence 26                                                                                                                                                                                 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| 3 US-09-100-414B-58 Sequence 50 3 US-09-100-414B-62 Sequence 62                       | 3 US-09-303-323-57 Sequence 57              | 3 US-09-303-323-56 Sequence 52                                                                                                          | 4 US-09-770-014-57 Sequence 57                                                                                                                                             | 4 US-09-770-014-58 sequence 58                                                                                                                                                                                                                                                                                                                             | 1 US-08-446-692-26 Sequence 26                                                                                                                                                                               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| 3 US-09-100-414B-58 Sequence 50 3 US-09-100-414B-62 Sequence 62                       | US-09-303-323-57 Sequence 57                | 3 US-09-303-323-59 Sequence 52                                                                                                          | 4 US-09-770-014-57 Sequence 57                                                                                                                                             | 4 US-09-770-014-58 sequence 58                                                                                                                                                                                                                                                                                                                             | 1 US-08-446-692-26 Sequence 26                                                                                                                                                                               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                                                                                                                                                                                                                                                                                                                        | 2 US-08-488-351A-34 Sequence 34                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 3 US-08-458-814-7 Sequence 7,                                                                                                              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                                            | 10 4 US-09-515-965A-1143 Sequence 1                                                                                                                                                                                                                                                     | 10 4 US-09-515-965A-1309 Sequence 1         | 0.0 10 4 US-09-515-9658-1344 Sequence 1.0 0 10 4 HS-09-381-879-9  | 0 10 4 US-09-350-641C-1143 Sequence 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          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| 88.0 49 3 US-09-100-414B-58 Sequence 30<br>88.0 49 3 US-09-100-414B-62 Sequence 62    | 88.0 49 3 US-09-303-323-57 Sequence 57      | 88.0 49 3 US-09-303-323-56 Sequence 52                                                                                                  | 88.0 49 4 US-09-770-014-57 Sequence 57                                                                                                                                     | 88.0 49 4 US-09-770-014-58 sequence 58                                                                                                                                                                                                                                                                                                                     | 88.0 51 1 US-08-446-692-26 Sequence 26                                                                                                                                                                       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                                                                                                                                                                                                                                                                         | 88.0 52 3 US-08-458-814-6 Sequence 6,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         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                                                                                                                                                                                                                                                                  | 82.0 10 3 US-09-082-2/9B-1309 Sequence 1:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 82.0 10 4 US-09-026-276-32 Sequence 33                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 82.0 10 4 US-09-315-304B-1143 Sequence 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 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                                            | 82,0 10 4 US-09-515-965A-1143 Sequence 1                                                                                                                                                                                                                                                | 82.0 10 4 US-09-515-965A-1309 Sequence 1    | 82.0 10 4 US-09-515-965A-1344 sequence 1.                         | 82.0 10 4 US-09-350-641C-1143 Sequence 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       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                                                                                                       | 82.0 10 4 US-09-350-641C-1344 Sequence I.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       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| 88.0 49 3 US-09-100-414B-58 Sequence 30<br>88.0 49 3 US-09-100-414B-62 Sequence 62    | 0 49 3 US-09-303-323-57 Sequence 57         | 88.0 49 3 US-09-303-323-56 Sequence 52                                                                                                  | 88.0 49 4 US-09-770-014-57 Sequence 57                                                                                                                                     | 88.0 49 4 US-09-770-014-58 sequence 58                                                                                                                                                                                                                                                                                                                     | 88.0 51 1 US-08-446-692-26 Sequence 26                                                                                                                                                                       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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 82.0 10 3 US-08-521-079-2 Sequence 2,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              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                                                                                                                                                                                                                               | 82.0 10 3 US-08-521-079-8 Sequence 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 82,0 10 3 US-08-521-079-12 Sequence 12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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                                                                                                                                                                                                                                                                  | 82.0 10 3 US-09-082-2/9B-1309 Sequence 1:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 82.0 10 4 US-09-026-276-32 Sequence 33                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 82.0 10 4 US-09-315-304B-1143 Sequence 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 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                                            | 82,0 10 4 US-09-515-965A-1143 Sequence 1                                                                                                                                                                                                                                                | 82.0 10 4 US-09-515-965A-1309 Sequence 1    | 82.0 10 4 US-09-515-965A-1344 sequence 1.                         | 82.0 10 4 US-09-350-641C-1143 Sequence 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       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                                                                                                       | 82.0 10 4 US-09-350-641C-1344 Sequence I.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 82.0 10 4 US-09-904-201A-32 Sequence 9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           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| 44 88.0 49 3 US-U9-100-414B-58 Sequence 30 44 88.0 49 3 US-09-100-414B-62 Sequence 62 | 88.0 49 3 US-09-303-323-57 Sequence 57      | 44 88.0 49 3 US-09-303-323-39 Sequence 62                                                                                               | 44 88.0 49 4 US-09-770-014-57 Sequence 57                                                                                                                                  | 44 88.0 49 4 US-09-770-014-58 sequence 58                                                                                                                                                                                                                                                                                                                  | 44 88.0 51 1US-08-446-692-26 Sequence 26                                                                                                                                                                     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                                                                                                                                                                                                                                                                         | 44 88.0 52 3 US-08-458-814-6 Sequence 5,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 41 82.0 10 3 US-09-082-279B-1143 Sequence 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 41 82.0 10 3 US-09-082-2798-1309 sequence 1.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 41 82.0 10 4 US-09-026-276-32 Sequence 33                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 41 82.0 10 4 US-09-315-304B-1143 Sequence I                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              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                                            | 41 82.0 10 4 US-09-515-965A-1143 Sequence 1                                                                                                                                                                                                                                             | 41 82.0 10 4 US-09-515-965A-1309 Sequence I | 41 82.0 10 4 US-U9-515-965A-1344 Sequence 1.                      | 41 82.0 10 4 US-09-350-641C-1143 Sequence 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    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                                                                                                                                                      | 41 82.0 10 4 US-09-486-143B-9 Sequence 9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         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| Sequence 8 Sequence 10 Sequence 12 Sequence 12 Sequence 12 Sequence 12 Sequence 12 Sequence 14 Sequence 14 Sequence 14                                                                                                    | Sequence 178 Sequence 2, Sequence 4, Sequence 4, Sequence 5, Sequence 3, Sequence 3, Sequence 3, Sequence 13, Sequence 13,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 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                                                                                                                                                                                                                                                                                                                     | 0.0%; Score 45; DB 6; Length 10;<br>0.0%; Pred. No. 0.028;<br>ve 0; Mismatches 3; Indels 0; Gaps 0;<br>S/07714540<br>Ronald G.                                                                                                                                                                                                                                  |
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MAY-1988<br>CON DATA:<br>NUMBER: 74,126<br>17-JUL-1987                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 9 77 70 10 10 10 n U                                                                                                                                                                                                                                                                                                                                            |
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PPLICATION NOTH: 110 DATE: 100 DATE:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | atch 7; 7; 1 EH 1 EH 1 EH 0 EN 0 E S S E E E E E E E E E E E E E E E E                                                                                                                                                                                              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| Guery M Best Lo Best Lo Matches Oy Db Db RESULT 2 US-07-714 ; Sequence ; Patent ; APPL                                                                                                                                                                                                                                                                          |
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| Appli<br>Appli<br>Appli<br>Appli<br>Appli<br>Appli<br>Appli<br>Appli<br>Appli<br>Appli                                                                                                                                    | Appl<br>Appl<br>Appl<br>Appl<br>Appl<br>Appl                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               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| Sequence 8, Sequence 8, Sequence 8, Sequence 8, Sequence 2, Sequence 22, Sequence 24 Sequence 24                                                                                                                          | aduence saduence sadu | , www.www.www.www.ww                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               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| 75-08-878-7689<br>75-08-878-7689<br>75-09-124-491<br>75-09-383-912-912-<br>75-08-341-219-<br>75-08-341-219-<br>75-08-341-219-<br>75-08-341-219-<br>75-08-341-219-<br>75-08-912-3144-<br>75-08-912-3144-<br>75-09-910-314- | 15-08-103-022-15-08-103-022-15-08-103-022-15-08-103-022-15-15-08-404-555-15-08-242-6781   15-08-893-749-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-466-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15-08-968-15 | 155-08-317-125-125-125-125-125-125-125-125-125-125                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     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US-08-9130-6<br>US-07-690-9830-6<br>US-07-690-9830-37<br>US-08-474-5460-8<br>US-08-181-879-18<br>US-08-181-879-18<br>US-08-188-423-7<br>US-08-188-223-7<br>US-08-188-223-5<br>US-08-188-223-5<br>US-08-188-223-5<br>US-08-188-223-5<br>US-08-187-251-6<br>US-08-480-370-6<br>US-08-480-370-6<br>US-08-480-370-6<br>US-08-480-370-6<br>US-08-480-370-6<br>US-08-480-370-6<br>US-08-480-370-6<br>US-08-480-370-6<br>US-08-480-370-6<br>US-08-480-370-6<br>US-08-480-370-6<br>US-08-480-370-6<br>US-08-480-370-6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            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US-09-419-1611<br>US-09-419-1611<br>US-09-941-0944<br>US-09-046-992<br>US-08-08-58-5992<br>US-08-98-5992<br>US-08-992-992<br>US-08-992-992<br>US-08-992-992<br>US-08-992-992<br>US-09-9831111<br>US-07-690-9831<br>US-07-690-9831<br>US-07-690-9831<br>US-07-690-9831<br>US-07-690-9831<br>US-07-690-9831<br>US-07-690-9831<br>US-07-690-9831<br>US-07-690-9831 |
| ,<br>,<br>,<br>,<br>,<br>,<br>,<br>,                                                                                                                                                                                      | 44444466                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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Pred. No. 0.043;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                   Score 44, DB 1; Length 10;
Pred. No. 0.043;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 32, Application US/0769093D

Sequence 32, Application US/0769093D

BENERAL INFORMATION:
APPLICANT: STRARAT. Andrew G.
APPLICANT: STRARAT, Andrew G.
TITLE OF INVENTION: FUSION PROTEINS
WUMBER OF SEQUENCES: 47

CORRESPONDENCES: ADDRESS:
ADDRESSEE: Foley & Lardner
STREET: 3000 K Street, N.W.
CITY: Washington, D.C.
COUNTRY: USA

ZIP: 20007-510

ZIP: 20007-510

COMPUTER RADABLE FORM:
MEDIUM TYPE: Flopy disk
COMPUTER: IBM PC COMPATIDLE
OPERATING SYSTEM: PC-DOS/NS-DOS
SOFTWARE: PROMER: PC-DOS/NS-DOS
SOFTWARE: PRICATION DATA:
APPLICATION NUMBER: US/07/690,983D
FILING DATE: 25-JUW-1991

CLASSIFICATION NUMBER: 25-JUW-1991

CLASSIFICATION NUMBER: 29,768

REFERENCE OF THE BETT, Stephen A.
REFERENCE OCCAT NUMBER: 29,768

REFERENCE OCCAT NUMBER: 29,768

REFERENCE OCCAT NUMBER: 29,768

REFERENCE OCCAT NUMBER: 29,768

REFERENCE (202) 672-5300

TELLEPHONE: (202) 672-5300
                                                     16786/148 CHAC
     NAME: BENT, Stephen A.
REGISTRATION NUMBER: 29,768
REPERENCE/DOCKET NUMBER: 1678
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202)672-5300
TELEPHOR: (202)672-5300
TELEPAX: (202)672-5300
TELEPAX: (202)672-5300
TELEPAX: (102)672-5300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: (202)672-5399
INFORMATION FOR SEQ ID NO: 32:
SEQUENCE CHARACTERISTICS:
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Best Local Similarity 70.0%;
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                           88.0%;
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Best Local Similarity 70.0
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                                                                                                                                                                                                                                             TOPOLOGY: unknown; MOLECULE TYPE: protein US-07-690-983D-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 EHWSXGXXPG 10
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US-07-690-983D-32
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TITLE OF INVENTION: ENZYME AND NOVEL COMPOUNDS USEFUL AS INHIBITORS THEREOF NUMBER OF SEQUENCES: 13
CORRESPONDENCES. 13
CORRESPONDENCES. 13
ADDRESSEE: Irel1 & Manella
STREET: 545 Middlefield Road, Suite 200
CITY: Mentlo Park
STATE: California
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
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                                                                                                                                                                                             COMPLY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTE: IBM PC compatible
COMPUTE: 19010607
SOUTHARE: PAPELICATION DATA:
APPLICATION NUMBER: US/07/714,540
FILING DATE: 19910607
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: REGISTATION NUMBER: 31,292
REGISTATION NUMBER: 31,292
REGISTATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEFRAK: 415-327-7291
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/690,983D
FILING DATE: 25-UUN-1991
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 2, Application US/07690983D
Patent No. 5403586
GENERAL INFORMATION:
APPLICANT: RUSSELL-JONES, Gregory J.
APPLICANT: STEWART, Andrew G.
APPLICANT: TSONIS, Con G.
TILLE OF INVENTION: FUSION PROTEINS
NUMBER OF SEQUENCES: 47
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 25-JUN-1991
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/AU90/00373
FILING DATE: 24-AUG-1990
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE: Foley & Lardner STRET: 3000 K Street, N.W. CITY: Washington, D.C. COUNTY: USA ZIP: 20007-5109
COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEX: 706141
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
TYPE: AMINO ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 70.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: linear MOLECULE TYPE: protein US-07-714-540-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      single
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Gaps
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GENERAL INFORMATION:
APPLICANT: Tananci Dr., Fuyuhiko
TITLE OF INVENTION: IDENTIFICATION AND CHARACTERIZATION OF
TITLE OF INVENTION: IDENTIFICATION AND CHARACTERIZATION OF
TITLE OF INVENTION: IDENTIFICATION OF PROTEIN FARNESYLTRANSFERASE
CORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESS:
ADDRESSEE: FOLGY & Larcher
STREET: 3000 K Street, N.W., Suite 500
COUNTRY: USA
ZIP: 20007-5109
COMPUTER: ISA PRICAPING
COMPUTER: ISA PC COMPATIBLE
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Sequence 22, Application US/08428488
Patent No. 5624894
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
BAIN-ENHANCED DELIVERY OF NEUROACTIVE
TITLE OF INVENTION: BRAIN-ENHANCED DELIVERY OF NEUROACTIVE
TITLE OF INVENTION: PEPTIDES BY SEQUENTIAL METABOLISM
NUMBER OF SEQUENCES: 107
CORRESPONDENCE ADDRESS:
ADDRESSEE: Burns, Doane, Swecker & Mathis
STREET: P.O. Bax 1404
CITY: Alexandria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 44; DB 1; Length 10;
Pred. No. 0.043;
0; Mismatches 3; Indels
                                                              3; Indels
Score 44; DB 1;
Pred. No. 0.043;
); Mismatches
                                                                                                                                                                                                                                                                                                                                       Sequence 5, Application US/08000931 Patent No. 5578477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       88.0%;
70.0%;
      Query Match
Best Local Similarity 70.0%;
Matches 7; Conservative
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Best Local Similarity 70.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEX: 904136
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 EHWSXGXXPG 10
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                                                                                                                                                                                       1 EHWSYGLRPG 10
                                                                                                                            1 EHWSXGXXPG 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX:
TELEX: 9
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                                                                           Sequence 1, Application US/08343883

Sequence 1, Application US/08343883

Sequence 1, Application US/08343883

Patent No. 5573767

GENERAL INFORMATION:

APPLICANT: Dudde J.M.

APPLICANT: Chouvet, Claude J.M.

APPLICANT: Chouvet, Claire D.

APPLICANT: Bonneau, Michel B.

TITLE OF INVENTION: Method for improving the organoleptic

TITLE OF INVENTION: qualities of the meat from uncastrated male domestic

TITLE OF INVENTION: peptide, in particular for producing these vaccines...

NUMBER OF SEQUENCES: 2

CORRESPONDENCE ADDRESS: 2

ADDRESSEE: Larson and Taylor

STREET: 727 Twenty-Third Street, South

COTTY: Arlington

COTTY: Arlington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matsuo, H.
Baba, Y.
G. Mair, R. M.
Arimura, A.
Schally, A. V.
Structure of the porcine LH- and FSH-releasing hormone. I. The proposed amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:

MEDIUM TYPE: 12202

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

SUSTRARE: Patentin Release #1.0, Version #1.25

SUSTRARE: PATENTIN RAISE: 10.00/343,883

FILING DATE: 17-NOV-1994

CLASSIFICATION NUMBER: US 07/946,495

FILING DATE: 09-NOV-1992

PRIOR APPLICATION DATA:

APPLICATION NUMBER: FR 9102513

FILING DATE: 01-MAR-1991

PRIOR APPLICATION DATA:

APPLICATION NUMBER: FR 9102513

FILING DATE: 10-DC-1991

INFORMATION FOR SEQ ID NO: 1:

SEQUENCE CHARACTERISTICS:

LYPE: amino acid

TYPE: Anino acid

TYPE: Linear

MITTER: Linear

MITTER: Linear

MITTER: Linear

MITTER: Linear

MITTER: Linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCATION: 1 "
OTHER INFORMATION: /label= pyro
OTHER INFORMATION: /note= "pyroglutamic acid"
PUBLICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note= "amidated glycine"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /label= NH2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE: peptide FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCATION: 10
COTHER INFORMATION: /
CTHER INFORMATION: /
FRATURE:
NAME/KEY: Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1334-1339
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AUTHORS:
AUTHORS:
TITLE: St
TITLE: FE
TITLE: COURNE:
VOLUME: 4
ISSUE: 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CITY: Arl
STATE: V:
COUNTRY:
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RESULT 9

US-08-341-219-12

Sequence 12, Application US/08341219

APPLICANT: Zohar, Y.

APPLICANT: Sherwood, N.

APPLICANT: Sherwood, N.

APPLICANT: Sherwood, N.

APPLICANT: Gothilf, Y.

APPLICANT: Gothilf, Y.

APPLICANT: Sherwood, N.

CORRESPONDENCES: 26

CORRESPONDENCES: 26

CORRESPONDENCE Edmonds

STREET: 1155 Avenue of the Americas

CITY: New York

STREET: 1155 Avenue of the Americas

CONTRY: USA

STREET: 10036-2711

COMPUTER: BIM PC Compatible

COMPUTER: BIM PC Compatible

COMPUTER: PLODS/MS-DOS

SOFTWARE: PATELICATION DATA:

APPLICATION NUMBER: US/08/341,219

FILING DATE: 05-DOS/MATHON.

APPLICANT NUMBER: US/08/341,219

FILING DATE: 05-DOS/MATHON.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 70.0%; Pred. No. 0.043;
Matches 7; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | NAME/KEY: Modified-site
| LOCATION: 1
| OTHER INFORMATION: / Droduct= "OTHER"
| OTHER INFORMATION: / Jabel= Glul
| OTHER INFORMATION: / Inte= "=pyroglutamic acid"
| PERTURE:
| NAME/KEY: Modified-site
| LOCATION: 10
| OTHER INFORMATION: / product= "OTHER"
| OTHER INFORMATION: / label= Gly10
| OTHER INFORMATION: / label= Gly10
| US-08-341-219-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTORNEY/AGENT INFORMATION:
NAME: COTUZZI, Laura A.
REGISTRATION NUMBER: 30742
REFERENCE/DOCKET NUMBER: 8399-003-999
                  ATTORNEY AGENT INFORMATION:
NAME: COTUZEL', Laura A.
REGISTRATION NUMBER: 30742
REFERENCE/DOCKET NUMBER: 8399-0
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 869-8864/9741
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
TYPE: amino acid
STRANDEDNESS: not relevant
TOPOLOGY: unknown
MOLECULE TYPE: peptide
HYPOTHETICAL: NO
ANTT-SENSE: NO
FRANTERSE: NO
FRANTERSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 EHWSXGXXPG 10
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APPLICANT: Zohar, Y.
APPLICANT: Rivier, J.
APPLICANT: Powell, J.
APPLICANT: Sherwood, N.
APPLICANT: Gochilf, Y.
TITLE OF INVENTION: Compounds and Methods For Controlling
TITLE OF INVENTION: Reproduction in Fish
NUMBER OF SEQUENCES: 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 44; DB 1; Length 10;
Pred. No. 0.043;
0; Mismatches 3; Indels
                  COUNTER: VIJIIIA

Z19: 22313-1404

COMPUTER READABLE FORM:

MEDIUM TYPE: FLORDY disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/428,488
FILING DATE: 27-APR-1995
CLASSIFICATION: 514
ATTONEY/AGENT INFORMATION:
NAME: Baumeister, Mary Katherine
REGISTRATION NUMBER: 26,254
REGISTRATION NUMBER: 26,254
REPERBNICE/POCKET NUMBER: 26,254
REGISTRATION NUMBER: 26,224
RELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
ILENGTH: 10 aming acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCATION: 10
; OTHER INFORMATION: /note= "Position 10 = Gly-NH2."
US-08-428-488-22
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OTHER INFORMATION: /note= "Position 1 = p-Glu."
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APPLICATION NUMBER: US/08/341.219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SSEE: Pennie & Edmonds
[: 1155 Avenue of the Americas
New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JMHER: US/08/341,219
05-DEC-1994
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ZIP: 10036-2711
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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Patent No. 5643877
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Best Local Similarity 70.0
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS
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STATE: Virginia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE:
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88.0%; Score 44; DB 1; Length 10;
Best Local Similarity 70.0%; Pred. No. 0.043;
Matches 7; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 22, Application US/08453588

Patent No. 5684145

GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT:
APPLICANT:
MILLE OF INVENTION:
TITLE OF INVENTION:
CARESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESS:
ADDRESSES:
ALSO NO. 568414561 Patent Department
STREET: 1300 Piccard Drive, Suite 206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY: U.S.F.

ZIP: 20850
COMPUTER BOBBLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OFERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/453,588
FILING DATE: 16-UN-1993
ATTORNEY/AGENT INFORMATION:
NAME: Mary E. Gornhey
REGISTRATON NUMBER: 34,409
TELECOMMUNICATION INFORMATION:
NAME: Mary E. Gornhey
REGISTRATON NUMBER: 34,409
TELECOMMUNICATION INFORMATION:
TELEFHONE: (301) 258-5200
INFORMATION FOR SEQ ID NO: 22:
SEGURANCE CHARACTERISTICS:
TENNOTH: 10 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:

NAME/KEY: Glu at position 1 is pyroglutamic acid
US-08-453-588-22
                                                                                                                                                                                                                                   /product= "OTHER"
/label= Glu1
/note= "=pyroglutamic acid"
                                                                                                                                                                                                                                                                                                                                                                       /product= "OTHER"
/label= Gly10
/note= "amidated"
                                                not relevant
                                                                                                                                   ANTI-SENSE: NO
FEATURE:
NAME/KEY: Modified-site
IOCATION: 1
OTHER INFORMATION: /label-
OTHER INFORMATION: /note=
FBATURE:
NAME/KEY: Modified-site
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LENGTH: 10 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                 TOPOLOGY: unknown
MOLECULE TYPE: peptide
HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 EHWSXGXXPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 EHWSHGLNPG 10
                                                                                                                                                                                                                                                                                                                                                     LOCATION: 10
OTHER INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
                         TYPE: amino acid
STRANDEDNESS: no
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CITY: Rockville
STATE: Maryland
COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-08-453-588-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-08-341-219-13
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| Sequence | 13, Application US/08341219
| Sequence | 20, Application US/08341219
| Patent No. 5643877
| GENERAL INFORMATION:
| APPLICANT: Rivier, J.
| APPLICANT: Rowell, J.
| APPLICANT: Gothilf, Y.
| TITLE OF INVENTION: Compounds and Methods For Controlling
| TITLE OF INVENTION: Reproduction in Fish
| NUMBER OF SEQUENCES: 26
| CORRESPONDENCE ADDRESS: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 70.0%; Pred. No. 0.043;
Matches 7; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STATE: W.1.

COMPUTRY: USA

ZIP: 10036-2711

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBW PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PEREDIN Release #1.0, Version #1.30

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/341,219
FILING DATE: 05-DEC-1994
CLASSIFICATION: 514
ATTORNEY/ABCHT INFORMATION:
NAME: Coluzi, Laura A.
REFERENCE/DOCKET NUMBER: 30742
REFERENCE/DOCKET NUMBER: 8399-003-999
TELECHMUNICATION INFORMATION:
TELEPHONE: (212) 869-864/9741
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                               ANTI-SENSE: NO
PEATURE:
NAME/KEY: Modified-site
LOCATION: 1
COTHER INFORMATION: /label= Glul
OTHER INFORMATION: /label= Glul
OTHER INFORMATION: /note= "=pyroglutamic acid"
FEATURE:
NAME/KEY: Modified-site
LOCATION: 10
OTHER INFORMATION: /product= "OTHER"
OTHER INFORMATION: /label= Gly10
CTHER INFORMATION: /label= Gly10
CTHER INFORMATION: /label= Gly10
CTHER INFORMATION: /note= "amidated"
US-08-341-219-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
STATE: N.Y.
TELECOMMUNICATION INFORMATION:
TELEPRA: (212) 790-9090
TELEPRA: (212) 869-8864/9741
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
TYPE: amino acid
STRANDEDNESS: not relevant
TOPOLOGY: unknown
MOLECULE TYPE: peptide
HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 EHWSXGXXPG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 EHWSYGLOPG 10
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CLASSIFICATION:
ACTACASIFICATION:
NAME: Maria C.H. Lin INCORNATION:
REGISTRATION NUMBER: 23.32
REFERENCE/DOCKET NUMBER: 1151-4146 US2
TELECOMMUNICATION INPORMATION:
TELEPRAX: (516)751-6849
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acide
TYPE: amino acide
TYPE: amino acide
TYPE: almino acide
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Best Local Similarity 70.0°
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE: peptide US-08-446-692-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 EHWSXGXXPG 10
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New York
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Patent No. 575951

GENERAL INFORMATION:

GENERAL INFORMATION:

GENERAL INFORMATION:

APPLICANT: Ladd, Anna
APPLICANT: Ladd, Anna
APPLICANT: Zamb, Timothy

TITLE OF INVENTION: and synthetic universal immune stimulators for vaccines
NUMBER OF SEQUENCES: 114

CORRESPONDENCE ADDRESS:

ADDRESSEE: Maria C. H. Lin
STREET: 345 Park Avenue
                                                                                    ó
                                                                                    Gaps
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                             88.0%; Score 44; DB 1; Length 10; 70.0%; Pred. No. 0.043;
                                                                                    3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STATE: COLULARY

COUNTRY: USA

ZIP: 80203

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPOTER: IBM PC compatible
COURTENT WHORER: DATABLE
FILING DATE: 26-JAN-1996
CLASSIFICATION NUMBER: 33,005
FILING PATE: CONCET NUMBER: 33,005
REGISTRATION NUMBER: 33,005
REGISTRATION NUMBER: 33,005
FILIEPRAX: (303) 863-9700
TELEPRAX: (303) 863-9700
                                                                                                                                                                                                                                                                         RESULT 12
US-08-591-917-1
Sequence 1, Application US/08591917
Patent No. 5707564
GENERAL INFORMATION:
APPLICANT: Nett, Torrance M
APPLICANT: Olde, Leonard Michael
TITLE OF INVENTION: A METHOD FOR TREATING CANCER
NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sheridan Ross & McIntosh
STREET: 1700 Lincoln Street, Suite 3500
CITY: Denver
STREET: Colorado
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
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Best Local Similarity 70.0
Matches 7; Conservative
                                                          Best Local Similarity 70.0
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 EHWSXGXXPG 10
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                                                                                                                                           1 EHWSXGXXPG 10
                                                                                                                                                                                                1 EHWSYGLRPG 10
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                                     Query Match
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US-08-796-598-6

Sequence 6, Application US/08796598

Sequence 10. 5827659

BAPLICANT: PATTERSON, DALE H.

APPLICANT: PATTERSON, DALE H.

APPLICANT: TARR, GEORGE E.

TITLE OF INVENTION: METHODS AND APPARATUS FOR SEQUENCING TITLE OF INVENTION: POLYMERS USING MASS SPECTROMETRY.

NUMBER OF SEQUENCE: 23

CORRESPONDENCE ADDRESS: 3

ADDRESSEE: Patent Administrator - Testa, Hurwitz & ADDRESSEE: Thibeault Administrator - Testa, Hurwitz & STREET: High Street Tower, 125 High Street

STREET: High Street Tower, 125 High Street

CITY: Boston

STATE: MA

STAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 44; DB 1; Length 10;
Pred. No. 0.043;
0; Mismatches 3; Indels
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MEDIUM TYPE: Floppy disk
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATIONS SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/796,598
FILING DATE: 07-FEB-1997
CLASSIFICATION DATA:
APPLICATION NUMBER: US 08/446,055
PRIOR APPLICATION NUMBER: US 08/446,055
FILING DATE: 19-MAY-1995
ATTORNEY/AGENT INFORMATION:
NAME: FLYNN EGG., Kerry A.
REGISTRATION NUMBER: 33,693
REGISTRATION NUMBER: 33,693
REGISTRATION NUMBER: SYP-115
TELEPHONE: (617) 248-7000:
ZIP: 10154-0053
ZIP: 10154-0053
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: EN PC compatible
COMPUTER: Patent PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/446,692
FILING DATE: 7--UNN-1995
CLASSIFICATION: 424
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Sequence 1. Application US/08488351A
Patent No. 5843446
GENERAL INFORMATION:
APPLICANT: Ladd, Anna
APPLICANT: Ladd, Anna
APPLICANT: Zamb, Timothy
TITLE OF INVENTION: Immunogenic LHRH peptide constructs
TITLE OF INVENTION: Immunogenic LHRH peptide constructs
NUMBER OF SEQUENCES: 114
CORRESPONDENCE ADDRESS:
ADDRESSEE: Maria C.H. Lin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
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                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Plopy disk
COMPUTER READABLE FORM:
MEDIUM TYPE: Plopy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/488,351A
FILING DATE: 7-UN-1995
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/446,692
FILING DATE: 7-UN-1995
CLASSIFICATION DATA:
APPLICATION NUMBER: US 08/229,275
FILING DATE: 17-UN-1995
CLASSIFICATION NUMBER: US 08/229,275
FILING DATE: 27-APR-1994
ATLOSARITON: 424
PRIOR APPLICATION NUMBER: US 08/229,275
FILING DATE: 27-APR-1992
CLASSIFICATION: 424
ATCORNEY/AGENT INFORMATION:
NAME: Maria C.H. Lin
REGISTRATION: WUMBER: 1151-4146 US2
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WG-08-480-494B-1
Sequence 1, Application US/08480494B
Patent No. 58430H
GENERAL INFORMATION:
APPLICANT: Roeske, Roger W.
TITLE OF INVENTION: LHRH Antagonist Peptides
NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
ADDRESSEE: LAHIVE & COCKFIELD
                                                                                                                                                                                                                                                                  SSEE: Maria C.H. Lin
[: 345 Park Avenue
New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           : (212)415-8745
(516)751-6849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 70.0
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: linear
MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 EHWSXGXXPG 10
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                                                                                                                                                                                                                                                                                                     STREET:
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Pred. No. 0.043;
                                                                                                                                                                                                                                    Score 44; DB 2; Length 10;
Pred. No. 0.043;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCATION: 1
; OTHER INFORMATION: /note= "This position is pyroGlu."
US-08-694-865-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CONFUTER READABLE FORM:
MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: Pacentr PC-DOS/MS-DOS
SOFTWARE: Pacentr Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/694,865
FILING DATE: 09-AUG-1996
CLASSIFICATION: 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
APPLICANT: POTTER, ANDREW A.
APPLICANT: MANNS, JOHN G.
TITLE OF INVENTION: GARH-LEUKOTOXIN CHIMERAS
NUMBER OF SEQUENCES: 34
CORRESPONDENCES: 35
ADDRESSEE: REED & ROBINS LLP
STREET: 285 HAMILTON AVENUE, SUITE 200
CITY: PALO ALTO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY AGENT INFORMATION:
NAME: MCCRACKEN, THOMAS P.
REGISTRATION NUMBER: 38,548
REFERENCE TOOKET NUMBER: 9001-0016.22
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415)327-3400
TELEPHONE: (415)327-321
INFORMATION FOR SEQ ID No: 18:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 anino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 18, Application US/08694865
Patent No. 5837268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          88.0%;
70.0%;
                                                                                                                                                                                                                                      Query Match
Best Local Similarity 70.0%;
Matches 7; Conservative
TELEFAX: (617) 248-7100
INPOTAMATION FOR EGG ID NO: 6SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 70.0
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                     single
                                                                                                                                  / TOPOLOGY: linear:
// MOLECULE TYPE: peptide
US-08-796-598-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 EHWSXGXXPG 10
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STRANDEDNESS: si
                                                                                                 TYPE: amino acid
STRANDEDNESS: sir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       USA
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US-08-694-865-18
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STATE: CA
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Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ZIP: 2080
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPATION SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/521,079
FILING DATE: 16-JUN-1993
APPLICATION NUMBER: 08/078,661
FILING DATE: 16-JUN-1993
APPLICATION NUMBER: EPA NO. 6019983 92.201.775.1
FILING DATE: 18-JUN-1992
CLASSIFICATION NUMBER: 29,772
REPREPROXE/COMPATION NUMBER: 29,772
REPREPROXE/COMPATION INFORMATION:
NAME: William W. Blacketone
REGISTRATION NUMBER: 29,772
REPREPROXE/COMPATION INFORMATION:
TELECOMPUNICATION INFORMATION:
TELECOMPUNICATION INFORMATION:
SEQUENCE CHARACTERISTICS:
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
INFORMATION INFORMATICS:
INFORMATION ACIDS
INFORMATION CHARACTERISTICS:
INFORMATION CHARACTERISTICS:
INFORMATION ACIDS
INFOR
                                                                                                                                                                                                                                                                                           Score 44, DB 2; Length 10;
Pred. No. 0.043;
0; Mismatches 3; Indels
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Pred. No. 0.043;
0; Mismatches 3; Indels
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| Sequence 22, Application US/08521079
| Patent No. 6019983
| GENERAL INFORMATION:
| APPLICANT: Willem Pieter Martin Hoekstra,
| APPLICANT: Willem Pieter Martin Hoekstra,
| APPLICANT: Willem Pieter Martin Hoekstra,
| APPLICANT: Obseptions Theodorus Gielen.
| TITLE OF INVENTION: Carrier system against GnRH NUMBER OF SEQUENCES: 30
| CORRESPONDENCE ADDRESS: ADDRESSES: A
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Best Local Similarity 70.0
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Best Local Similarity 70.0
Matches 7; Conservative
SEQUENCE CHARACTERISTICS
                                                           TYPE: amino acid
STRANDENNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-447-175A-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: protein
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Patent No. 5869240
GENERAL INFORMATION:
APPLICANT: PATTERSON, DALE H.
TITLE OF INVENTION: METHODS AND APPARATUS FOR SEQUENCING
TITLE OF INVENTION: POLYMERS WITH A STATISTICAL CERTAINTY USING MASS
TITLE OF INVENTION: SPECTROMETRY.
NUMBER OF SEQUENCES: 23
CORRESPENDENCE ADDRESS:
ADDRESSEE: Patent Administrator - Testa, Hurwitz &
ADDRESSEE: Thibeault, LLP
STREET: High Street Tower, 125 High Street
CITY: Boston
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
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Pred. No. 0.043;
0; Mismatches 3; Indels
                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYBE: FIDOPDY disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN PC-DOS/MS-DOS
SOFTWARE: PATENTIN RC-BOS/MS-DOS
SOFTWARE: PATENTIN DATA:
APPLICATION NUMBER: US/08/480,494B
FILING DATE: 0'-JUN 1995
CLASSIFICATION: 514
ATTONNEY/AGENT INPORMATION:
NAME: DECONTI, GIULIO A.
REGISTRATION NUMBER: 31,503
REBERROCA/DOCKET NUMBER: PPI-007
TELEPHONE: (617)227-7400
TELEPHONE: (617)227-7401
TELEPHONE: (617)227-7591
INPORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
"ENGTH: 10 mmino acids
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MEDIUM TYPE: Flopped disk

MEDIUM TYPE: Flopped disk

COMPUTER: IBM PC compatible

COMPUTER: IBM PC compatible

COMPUTER: IBM PC compatible

COMPUTER: IBM PC compatible

SOFTWARE: Patentin Release #1.0, Version #1.30

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION NUMBER: US/08/447,175A

FILING DATE: 19-MAY-1995

CLASSIFICATION: 422

ATTORNEY/AGENT INPORMATION:

NAME: RAUGHENBARY

REGISTRATION NUMBER: 40,137

REFERENCE/POCKET NUMBER: SYP-114

TELECOMMUNICATION INPORMATION:

METERSTRATION INPORMATION:

METERSTRATION INPORMATION:
    60 State Street, Suite 510
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70.0%;
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TELEFAX: (617) 248-7100
INFORMATION FOR SEQ ID NO: 6:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 70.0
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear
MOLECULE TYPE: peptide
                                                                            Massachusetts
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                                              Boston
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                                                                                                                      COUNTRY:
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Gaps
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APPLICANT: COolidge, Thomas
APPLICANT: Coolidge, Thomas
APPLICANT: Coolidge, Thomas
APPLICANT: Schuerer, Sheldon
APPLICANT: Wylie, Dwane
TITLE OF INVENTION: PURIFICATION DIRECTED CLOSING OF PEPTIDES
TIVEBEN OF SEQUENCES: 8
ADDRESSER: Merchant & Gould
STREET: 3100 No. 6127150west Center, 90 S. 7th Street
CITY: Minneapolis
STATE: NN
COUNTRY: U.S.A.
COMPUTER READABLE FORM:
MRDIUM TYPE: Diskette
COMPUTER: BM Compatible
COMPUTER: BM COMPAGIBLE
COMPUTER: BM COMPAGIBLE
COMPUTER: BASEQ Version 1.5
SCHWARE: FaseSEQ Version 1.5
CURRENT APPLICATION NUMBER: US/08/927,128
FILING DATE: 05-SEP-1997
CTASCH FILORION NUMBER: US/08/927,128
FILING DATE: 06-SEP-1997
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                                                                                                                                                                                                                                                                                                                      COUNTRY: USA
ZIP: 10154-0054
ZIP: 10154-0054
COMPUTER READABLE FORM:
MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC Windows
SOFTWARE: WORD 97
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/100,414B
FILING DATE: 20-UINE-1998
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: Maria H. Lin
REGISTRATION NUMBER: 29,323
REFERENCE/DOCKET NUMBER: 1151-4157
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 anino acide

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                                                                                                                         ADDRESSEE: Morgan & Finnegan, L.L.P. STREET: 345 Park Avenue CITY: New York
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/680,004
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Patent No. 6127150
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Matches 7; Conservative
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TOPOLOGY: linear
MOLECULE TYPE: peptide
IITLE OF INVENTION: IMP
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 EHWSXGXXPG 10
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US-08-927-128-13
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                                                                                                                                  US-U9-124-491-18
US-U9-124-491-18
Sequence 18, Application US/09124491
Patent No. 6022960
GENERAL INPORMATION:
APPLICANT: POTTER, ANDREW A.
APPLICANT: PANNS, JOHN G.
TITLE OF INVENTION: GRAH-LEUKOTOXIN CHIMERAS
NUMBER OF SEQUENCES: 34
CORRESPONDENCE ADDRESS:
ADDRESSEE: REED & ROBINS LLP
STREET: 285 HAMILTON AVENUE, SUITE 200
CITY: PALO ALTO
CONTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
NEDIUM TYPE: Flopy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: DEALORIN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/124,491
FILING DATE:
FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING FILING F
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PRIOR APPLICATION
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/594,865
FILING DATE: 09-AUG-1996
APPLICATION NUMBER: US 08/387,156
FILING DATE: 10-FEB-1995
PRIOR APPLICATION DATA:
FILING DATE: 14-OCT-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/779,171
FILING DATE: 16-OCT-1991
ATTORNEY/AGENT INFORMATION:
NAME: MCCRACKEN, THOMAS P.
REGISTRATION NUMBER: 38,548
REGISTRATION NUMBER: 38,548
TELECOMMUNICATION:
THE TELECOMMUNICATION:
TELECOMMUNICATION:
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Patent No. 6025468
GENERAL INFORMATION:
GENERAL THROMATION:
TITLE OF INVENTION: NOVEL LHRH PEPTIDE
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (415)327-3400
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 70.0
Matches 7; Conservative
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STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 EHWSXGXXPG 10
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US-09-100-414B-77
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US-09-124-491-18
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US-06-912-314A-12

| US-06-912-314A-12 |
| US-06-912-314A-12 |
| Sequence 12, Application US/08912314A |
| Patent No. 6210927 |
| APPLICANT RIVING. V. J. APPLICANT RIVING. V. J. APPLICANT RIVING. V. J. APPLICANT Sherwood, N. APPLICANT Sherwood, N. APPLICANT Sherwood, N. APPLICANT Sherwood, N. APPLICANT SHEWERS. 26 CORRESPONDENCE ADDRESS 26 CORPUTAN N. YORK COMPATION N. YORK COMPATION N. YORK COMPATION N. YORK COMPATION STREAM PAPLICANTON DATA: REPEASE PATENTIN REPORT NOW STREAM SPELICANTON NOWBER: US/08/912,314A PRIOR PAPLICANTON NOWBER: US/08/912,314A PAPLICANTON NOWBER: U
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Best Local Similarity 70.0%; Pred. No. 0.043;
Matches 7; Conservative 0; Mismatches 3; Indels
                                      SIRRANDLOMES: INC. ELEVALL.

TOPOLOGY: UNKNOWN
MOLECULE TYPE: peptide
HYPOTHETICAL: NO
ANTI-SENSE: NO
FAMIL-SENSE: NO
FAMIL-SENSE: NO
FAMIL-SENSE: NO
OTHER INFORMATION: /product= "OTHER"
OTHER INFORMATION: /label= Glul
OTHER INFORMATION: /note= "=pyroglutamic acid"
FEATURE: NAME/KEY: Modified-site
LOCATION: 10
OTHER INFORMATION: /product= "OTHER"
OTHER INFORMATION: /label= Gly10
OTHER INFORMATION: /label= Gly10
OTHER INFORMATION: /label= Gly10
OTHER INFORMATION: /label= Gly10
TYPE: amino acid
STRANDEDNESS: not relevant
TOPOLOGY: unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 EHWSXGXXPG 10
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; Sequence 11, Application US/08912314A
; Patent No. 6210927
; GENERAL INFORMATION:
APPLICANT: Rivier, J.
APPLICANT: Powell, J.
APPLICANT: Sherwood, N.
APPLICANT: Gothlif, Y.
TITLE OF INVENTION: Compounds and Methods For Controlling
TITLE OF INVENTION: Reproduction in Fish
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 88.0%; Score 44; DB 3; Length 10; 70.0%; Pred. No. 0.043;
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STATE: N.Y.
COUNTRY: NO. 3.
COMPUTER READABLE FORM:
MEDIUM TYRE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PARENTIN RElease #1.0, Version #1.30
CURRENT APPLICATION NUMBER: US/08/912,314A
FILING DATE: 30-UN-1997
CLASSIFICATION NUMBER: US/08/912,314A
PRICATION NUMBER: US/31,219
FILING DATE: 08-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: COPILEZI, Laura A.
REGISTRATION NUMBER: 30/42
ATTORNEY/AGENT INFORMATION:
NAME: COPILEZI, Laura A.
REGISTRATION NUMBER: 30/42
REPERENCE/DOCKET NUMBER: 30/99
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION 10/90/9090
   FILING DATE: 15-JUL-1995
ATTORNEY/AGENT INFORMATION:
NAME: CATLEN CHARLES G
REGISTRATION NUMBER: 35,093
REFERENCE/DOCKET NUMBER: 8648.2USD1
TELECOMUNICATION INFORMATION:
TELEPHONE: 612/332-5300
TELEPHONE: 612/332-5001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: (212) 869-8664/9741
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                      TELEX:
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
TYPE: amino acid
STRANDENESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ANTI-SENSE: NO FRAGMENT TYPE: N-terminal ORIGINAL SOURCE:
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Best Local Similarity 70.0
Matches 7; Conservative
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US-08-912-314A-11
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Pred. No. 0.043;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                        88.0%; Score 44; DB 3; Length 10; 70.0%; Pred. No. 0.043; ive 0; Mismatches 3; Indels
                                                                                                 /product= "OTHER"
/label= Glu1
/note= "=pyroglutamic acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: Wang, Chang Yi
TITLE OF INVENTION: INVINI INFORMINE
TITLE OF INVENTION: INVINIER SEQUENCES: 106
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                         /product= "OTHER"
/label= Gly10
/note= "amidated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE: Morgan & Finnegan, L.L.P. STREET: 345 Park Avenue CITY: New York STATE: NY COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY: USA

COMPUTER: 10154-0054

COMPUTER: READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC Windows
SOFTWARE: Word 97

CURRENT APPLICATION NUMBER: US/09/303,323
FILING DATE: 30-APR-1999
CLASSIFICATION NUMBER: 09/100,414
FILING DATE: 20-UNE-1998
ATTORNEY/AGENT INFORMATION:
NAMB: Maria H. Lin
REGISTRATION NUMBER: 29,323
REGISTRATION NUMBER: 29,323
REGISTRATION NUMBER: 29,323
REGISTRATION NUMBER: 29,323
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 77, Application US/09303323
Patent No. 6228987
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Best Local Similarity 70.0%;
Matches 7; Conservative
                                                                                                                                                              FEATURE:
NAME/KEY: Modified-site
LOCATION: 10
OTHER INFORMATION: /label:
CTHER INFORMATION: /label:
CTHER INFORMATION: /note=
US-08-912-314A-13
                                                            Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEPHONE: 212-758-480
TELEFAX: 212-751-6849
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 70.0
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-09-303-323-77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 EHWSXGXXPG 10
HYPOTHETICAL: NO
ANTI-SENSE: NO
FEATURE: NO
FEATURE: NOAHEFIEG-:
LOCATION: 1
OTHER INPORMATION: ,
OTHER INFORMATION: ,
OTHER INFORMATION: ,
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Gequence 13, Application US/08912314A

Gequence 13, Application US/08912314A

APPLICANT: Zohar, Y.

APPLICANT: Bowell, J.

APPLICANT: Brewood, N.

APPLICANT: Gethif, Y.

TITLE OF INVENTION: Reproduction in Fish

NUMBER OF SEQUENCES: 26

CORRESPONDENCES: 26

CORRESPONDENCES: 26

ADDRESSEE: Pennie & Edmonds

STREET: 1155 Avenue of the Americas

CITY: New York
                                                                                                                                                                                                                                                                                                                                                                             88.0%; Score 44; DB 3; Length 10; 70.0%; Pred. No. 0.043;
                                                                                                                                                                                                                                                                                                                                                                                                                 3; Indels
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MEDIUM TYPE: Floppy disk
MEDIUM TYPE: Floppy disk
COMPUTER: ELBA PC compatible
CORREATION SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTION DATA:
APPLICATION NUMBER: US/08/912,314A
FILING DATE: 30-JUN-1997
CLASSIFICATION DATA:
APPLICATION NUMBER: 08/341,219
FILING DATE: 05-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: COTUZZi, Laura A.
REGISTRATION NUMBER: 30742
REGISTRATION NUMBER: 30742
REGISTRATION NUMBER: 30742
REGISTRATION NUMBER: 30742
REGISTRATION SEC 112) 790-9090
TELEPHONE: (212) 790-9090
TELEPHONE: (212) 790-9090
TELEPHONE: CALLO SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
LEMGTH: 10 amino acids
LEMGTH: 10 amino acids
                                                                                                                                                 /product= "OTHER"
/label= Glu1
/note= "=pyroglutamic acid"
                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                                                                                                                                      /product= "OTHER"
/label= Gly10
/note= "amidated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ss: not relevant
unknown
                       MOLECULE TYPE: peptide
HYPOTHETICAL: NO
ANTI-SENSE: NO
ANTI-SENSE: NO
TATURE: NAME/KEY: Modified-site
LOCATION: 1
OTHER INFORMATION: /label:
OTHER INFORMATION: /label:
OTHER INFORMATION: /label:
                                                                                                                                                                                                                             NAME/KRY: Modified-site
LOCATION: 10
COTHER INFORMATION: /prod
OTHER INFORMATION: /labe
US-08-912-314A-12
                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 70.0
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: unknown MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 EHWSXGXXPG 10
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             unknown
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COUNTRY: USA
ZIP: 10036-2711
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US-08-912-314A-13
             TOPOLOGY:
                                                                                                                                                                                                                    FEATURE:
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TITLE OF INVENTION: Pharmaceutical Compositions of Peptides Having Low
TITLE OF INVENTION: Solubility in Physiological Medium
FILE REFERENCE: P/17-175
GURRENT APPLICATION NUMBER: U5/99/451,013
CURRENT FILING DATE: 1999-11-29
PRIOR APPLICATION NUMBER: EP 97108593.1
PRIOR APPLICATION NUMBER: EP 97108593.1
PRIOR PLING DATE: 1997-05-28
PRIOR PLING DATE: 1997-12-03
NUMBER OF SEQ ID NOS: 1
IENGTH: 10
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Pred. No. 0.043;
0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
NAME/KEY: UNSURE
LOCATION: (1)..(10)
OTHER INFORMATION: Luteinising hormone releasing hormone
US-09-451-013-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1, Application US/09698134;
Patent No. 6433135;
GENERAL INFORMATION:
APPLICANT: EL TAYAN, Nabil
APPLICANT: EL TAYAN, Nabil
APPLICANT: EHAO, Xuan
APPLICANT: BENTLEY, Michael D.
TITLE OF INTENTION: PEG-LHRH ANALOG CONJUGATES
FILE REFERENCE: EL-TAYAR=2A;
CURRENT APPLICATION NUBBER: US/09/698,134;
CURRENT FILING DATE: 2000-10-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: ROSEK, ROGER W.
TITLE OF INVENTION: LHRH Antagonist Peptides
FILE REFERENCE: PPI-00/CPUS
CURRENT APPLICATION NUMBER: US/08/973,378
CURRENT FILING DATE: 1998-04-06
EARLIER APPLICATION NUMBER: 08/480,494
EARLIER APPLICATION NUMBER: 08/480,494
NUMBER OF SEQ ID NOS: 1
SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 44; DB
Pred. No. 0.04
0; Mismatches
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US-08-973-378-1
Sequence 1, Application US/08973378
; Patent No. 6423686
; GENERAL INFORMATION:
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Best Local Similarity 70.0%;
Matches 7; Conservative (
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Best Local Similarity 70.0%;
Matches 7; Conservative
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CORGANISM: Homo sapiens
US-08-973-378-1
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ORGANISM: Homo sapiens
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US-09-698-134-1
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Sequence 28 Application US/09026276

Patent No. 6319503

GENERAL INFORMATION:
APPLICANT: Fenten, John H

APPLICANT: Tramontano, Alfonso
APPLICANT: Lohnas, Gerald L

APPLICANT: Pilon, Aprile L

APPLICANT: Roberts, Steven F

TITLE OF INVENTION: HEAT-SHOCK FUSION-BASED VACCINE SYSTEM
FILE REFERENCE: U.S. Patent Application No. 6319503 09\026,276

CURRENT APPLICATION NUMBER: US/09\026,276

CURRENT PILING DATE: 1988-02-19

NUMBER OF SEQ ID NOS: 35

SOFTWARE: Patentin Ver. 2.0

SEQ ID NO 28

LENGTH: 10
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                                                                                                                                                                                             Sequence 1, Application US/09373180
Facent No. 6297354
Facent No. 6297354
Facent No. 6297354
Facent No. 6297354
Facent No. 6297356
Facent No. 6297356
Facent No. 6297356
Facent No. 6297356
Facent No. 6297357
Facent No. 629737
Facent No. 629
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Pred. No. 0.043;
0; Mismatches
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Patent No. 6331520
GENERAL INFORMATION:
APPLICANT: Richardson, Peter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     88.0%;
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                                TYPE: PRT
CRGANISM: Homo sapiens
US-09-373-180-1
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Best Local Similarity
Matches 7; Conserv
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CRGANISM: Porcine
US-09-026-276-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 28
US-09-026-276-28
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US-09-451-013-1
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US-09-373-180-1
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OTHER INFORMATION: Description of Artificial Sequence: Synthetic

CHER INFORMATION: LH-RH

US-09-639-483C-3
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Best Local Similarity 70.0%; Pred. No. 0.043;
Matches 7; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                          Score 44; DB 4; Length 10;
Pred. No. 0.043;
0; Mismatches 3; Indels
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OTHER INFORMATION: /note= "This position is pyroGlu."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: Patent: 1.30
SOFTWARE: Patent: Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/383,912
                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 18, Application US/09383912
Patent No. 6521746
GENERAL INFORMATION:
APPLICANT: POTTER, ANDREW A.
APPLICANT: MANNS, JOHN G.
TITLE OF INVENTION: GARH-LEUKOTOXIN CHIMERAS
NUMBER OF SEQUENCES: 34
CORRESPONDENCE ADDRESS:
ADDRESSEE: REED & ROBINS LLP
STREET: 285 HAMILTON AVENUE, SUITE 200
CITY: PALO ALTO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AFFLANCE DATE
ATTORNEY/AGENT INFORMATION:
NAME: MCGRACKEN, THOMES P.
REGISTRATION NUMBER: 38,548
REFERENCE/DOCKET NUMBER: 9001-0016.22
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415)327-3231
TELEPHONE: (415)327-3231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/694,865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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INFORMATION FOR SEQ ID NO: 18:
SEQUENCE CHARACTERISTICS:
SOFTWARE: Patentin version 2.1 SEQ ID NO 3 LENGTH: 10 TYPE: PRT ORGANISM: Artificial Sequence
                                                                                                                                                                                                               88.0%;
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STRANDEDNESS: single
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Best Local Similarity
Matches 7; Conserv
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Patent No. 6506730
APPLICANT: PARK, MYUNG-OK
TITLE OF INVENTION: THE NASAL TRANSMUCOSAL DELIVERY OF PEPTIDES
TITLE OF INVENTION: CONJUGATED WITH BIOCOMPATIBLE POLYMERS
FILE REFERENCE: 428.1002
CURRENT APPLICATION NUMBER: US/09/639,483C
CURRENT FILING DATE: 2000-08-15
PRIOR PILING DATE: 1999-08-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        88.0%; Score 44; DB 4; Length 10; 70.0%; Pred. No. 0.043;
                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 10;
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                                                                                                                                                                                                                                        OTHER INFORMATION: synthetic
NAME/KEY: misc feature
LOCATION: (1)...(1)
OTHER INFORMATION: Glu is modified with a pyro group.
NAME/KEY: misc_feature
LOCATION: (10)...(10)
COTHER INFORMATION: Gly is modified with -NH2 group.
US-09-698-134-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 1, Application US/09256599; Patent No. 6455499; GENERAL INPORMATION:
APPLICANT ROSEKe, ROGER W.
TITLE OF INVENTION: LHRH Antagonist Peptides
FILE REFERENCE: PPI-007CFUS
CURRENT PELICATION NUMBER: US/09/256,599; CURRENT FILING DATE: 1999-02-23; EARLIER APPLICATION NUMBER: 08/480,494; MUMBER OF SOCI ID NOS: 1
SOFTWARE: Patentin Ver. 2.0
; SOFTWARE: Patentin Ver. 2.0
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Pred. No. 0.043;
0; Mismatches
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  PRIOR APPLICATION NUMBER: 60/083,340
PRIOR FILING DATE: 1998-04-28
PRIOR APPLICATION NUMBER: PCT/US99/09160
PRIOR FILING DATE: 1999-04-28
NUMBER OF SEQ ID NOS: 1
SOFTWARE: Patentin version 3.1
LENGTH: 10
                                                                                                                                                                                                                                                                                                                                                                                                                                     88.0%;
70.0%;
                                                                                                                                                                               TYPE: PRT
ORGANISM: Artificial Sequence
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Best Local Similarity 70.0
Matches 7; Conservative
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Best Local Similarity 70.0
Matches 7; Conservative
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CRGANISM: Homo sapiens
US-09-256-599-1
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US-09-639-483C-3
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US-09-256-599-1
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Gaps
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OTHER INFORMATION: Description of Artificial Sequence: Illustrative
OTHER INFORMATION: Peptide
US-09-525-007-1
                                                                                                                                                                                                                                                                                                                                               US-09-964-201A-28

US-09-964-201A-28

Sequence 28 Application US/09964201A

Patent NO. 6660271

GENERAL INFORMATION:
APPLICANT: Fenten, John H

APPLICANT: Lohnas, Gerald L

APPLICANT: Lohnas, Gerald L

APPLICANT: Lohnas, Gerald L

APPLICANT: Pilon, Aprile L

APPLICANT: Polon, Aprile L

APPLICANT: Polon, Aprile L

APPLICANT: Polon, Aprile L

APPLICANT: Polon, Aprile L

APPLICANT: Roberts, Steven F

TITLE OF INVENTION: HEAT-SHOCK FUSION-BASED VACCINE SYSTEM

FILE REPERENCE: U.S. Patent Application No. 6660271 09\026.276

CURRENT FILING DATE: 2002-05-21

NUMBER OF SEQ ID NOS: 35

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 28

LENGTH: 10

LENGTH: 10

LENGTH: 10
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                                                                                                                                                                                   Score 44, DB 4; Length 10, Pred. No. 0.043; 0, Mismatches 3; Indels
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Patent No. 6685947
GENERAL INPORMATION:
APPLICANT: SOURAVI, GHOSH
APPLICANT: SOURAVI, GHOSH
APPLICANT: WALKER, JOHN
ITLE OF INVENTION: T HELPER CELL EPITOPES
FILE REFERENCE: 47-152
CURRENT APPLICATION UNMERR: US/09/890,650
CURRENT FILING DATE: 2001-11-05
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 28
LIBROTH: 10
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ORGANISM: Canis sp.
FEATURE:
NAME/KEY: MOD_RES
LOCATION: (1)
OTHER INFORMATION: pyroglutamic acid
US-09-890-650-28
                                                                                                                                                                                   Query Match
Best Local Similarity 70.0%;
Matches 7; Conservative (
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 1
LENGTH: 10
TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query'Match
Best Local Similarity 70.0
Matches 7; Conservative
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ORGANISM: Porcine
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US-09-890-650-28
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Pred. No. 0.043;
0; Mismatches
                                                                                       Sequence 77, Application US/09770014

Patent No. 6559282
GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: IMMUNOGENS
TITLE OF INVENTION: IMMUNOGENS
TITLE OF SEQUENCES: 106
CORRESPONDENCE ADDRESS:
ADDRESSES: Worgan & Finnegan, L.L.P.
STREET: 345 Park Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION:
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
9/100,414
FILING DATE: 20-JUNE-1998
ATTORNEY/AGENT INFORMATION:
NAME: Maria H. Lin
REGISTRATION NUMBER: 29,323
REFERENCE/DOCKET NUMBER: 1151-4157
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-758-4800
                                                                                                                                                                                                                                                                                                   STATE: NEW STATE: Floppy disk COMPUTER: IBM PC COMPATIBLE POEM: NOT 97 COMPARE: Word 97 CURRENT APPLICATION DATA: NOT 97 RILING DATE: NEW STATE: US/09/770,014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: 212-751-6849
INFORMATION FOR SEQ ID NO: 77:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        88.0%;
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Best Local Similarity 70.0
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear

MOLECULE TYPE: peptide

US-09-770-014-77
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         EHWSYGLRPG 10
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PRIOR FILING DATE: 1999
NUMBER OF SEQ ID NOS: 1
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3Y: linear
                                                               RESULT 35
US-09-770-014-77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 36
US-09-525-007-1
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Vaccines Containing No. 5679355-Ionic Surfactant
Vesicles
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                                                                                                                                                                        JEAUGHL VIC. 3780ATT, NETT, TORRANCE M., GLODE, LEONARD M.
TITLE OF INVENTION: METHOD FOR STERLIZING ANIMALS USING HORNORE-TOXIN CONJUGATE COMPOUNDS
HORNORE-TOXIN CONJUGATE COMPOUNDS
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/94,625
FILING DATE: 20-JUL-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 837,639
FILING DATE: 14-FEB-1992
PLING DATE: 23-FEB-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 43
5422893
; Patent No. 5492893
; Patent No. 5492893
; TITLE OF INVENTION: HORMONE-TOXIN CONJUGATE COMPOUNDS
TITLE OF INVENTION: HORMONE-TOXIN CONJUGATE COMPOUNDS
; TORRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/94,250
; FILING DATE: 20-UUL-1993
; PRIOR APPLICATION DATA:
APPLICATION NUMBER: 837,639
; FILING DATE: 14-FEB-1992
; RILING DATE: 23-FEB-1999
; FILING DATE: 23-FEB-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                        88.0%; Score 44; DB 6; Length 10; 70.0%; Pred. No. "0.043; Live 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3; Indels
              3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 44; DB 6;
Pred. No. 0.043;
0; Mismatches
70.0%; Pred. No. 0.043;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 2, Application US/08302915; Patent No. 5679355; GENERAL INFORMATION: GENERAL INFORMATION: A APPLICANT: A Lexander, James A PPLICANT: Brewer, James TITLE OF INVENTION: Vaccines Contain TITLE OF INVENTION: Vaccines Contain NUMBER OF SEQUENCES: 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 70.0%;
Matches 7; Conservative
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Best Local Similarity 70.0
Matches 7; Conservative
Best Local Similarity 70.0
Matches 7; Conservative
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                                               1 EHWSXGXXPG 10
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                                                                           1 EHWSYGLRPG 10
                                                                                                                                                                 Patent No. 5488036
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LENGTH: 10
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                                                                                                                              RESULT 42
5488036-1
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5169865
; Patent No. 5169865
; TILE OF INVENTION: METHAN MEJATING
; BINDING TENSULOCATION AND MEDIATING
; UNMBER OF SEQUENCES: 12
; CURRENT APPLICATION PATA:
; APPLICATION AND BATA:
; APPLICATION NATE:
; APPLICATION NATE:
; LENGTH: 10
5169865-10
5169865-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 10;
                     Score 44; DB 4; Length 10;
Pred. No. 0.043;
0; Mismatches 3; Indels
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5168061-1
; Patent No. 5168061
; Patent No. 5168061
; TITLE OF INVENTION: HUMAN CHORIONIC PEPTIDASE-1
; TITLE OF SEQUENCES: 2
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/323,325
; FILING DATE: 14-MAR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 863,310
; TILING DATE: 15-MAY-1986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       88.0%; Score 44; DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 44; DB 6;
Pred. No. 0.043;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                      88.0%;
                     Query Match
Best Local Similarity 70.0%;
Matches 7; Conservative
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Best Local Similarity 70.0
Matches 7; Conservative
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Best Local Similarity 70.0
Matches 7; Conservative
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Best Local Similarity 70.0%; Pred. No. 0.06;
Matches 7; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                   Score 44; DB 1; Length 14;
Pred. No. 0.06;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                 Sequence 24, Application US/07690983D

Sequence 24, Application US/07690983D

Patent No. 5403586

GENERAL INFORMATION:

APPLICANT: SUSSELL-JONES, Gregory J. APPLICANT: TSOMIS, Con G.

APPLICANT: TSOMIS, Con G.

TITLE OF INVENTION: FUSION PROTEINS

NUMBER OF SEQUENCES: 47

CORRESPONDENCE ADDRESS:

ADDRESSE: Foley & Lardner

STREET: 3000 K Street, N.W.

CITY: Washington, D.C.

COUNTRY: USA

COMPUTER: IBM C Compatible

COMPUTER: IBM C Compatible

COMPUTER: IBM C Compatible

OPERATING SYSTEM: PLOPDY disk

COMPUTER: IBM C Compatible

OPERATION SYSTEM: PALON 1991

CLASSIFICATION NUMBER: US/07/690,983D

PRICH APPLICATION DATA:

APPLICATION NUMBER: DCT AUG-1990

CLASSIFICATION NUMBER: 29.768

REFERENCE DOCKET NUMBER: 16786/148 CHAC

TELESPONE! (202) 672-5300

TELESPONE: (202) 672-5300
REPERENCE/DOCKET NUMBER: 16786/148 CHAC TELECOMMUTICATION INFORMATION:
TELEPHONE: (202) 672-5300
TELEPAX: (202) 672-5399
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
                                                                                                                                                                                                         88.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: (202)672-5399
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14 amino acids
                                                                                                                                                                                                         Query Match
Best Local Similarity 70.0
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                  TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-07-690-983D-22
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3Y: linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3; Indels
                                                CORRESPONDENCE ADDRESS:
CORRESSIONDENCE ADDRESS:
STREET: 3000 K Street, N.W.
CITY: Washington, D.C.
COUNTRY: USA
ZIP: 20007-5109
COMPUTER READABLE FORM:
MEDTION TYPE: FOLDBY disk
COMPUTER: IBM PC COMPATIBLE
OPPRATING SYSTEM: PC-DOS/NS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/690,983D
FILING DATE: 25-JUN-1991
CLASSIFICATION *435
PRIOR APPLICATION NUMBER: 25-JUN-1991
FILING DATE: 24-AUG-1990
ATPONDEY/AGENT INPORMATION:
NAME: BENT', Stephen A.
REGISTRATION NUMBER: 29,768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 45
US-07-690-993D-22
Sequence 22, Application US/07690983D
Patent No. 5403586
RENERAL INFORMATION:
APPLICANT: RUSSELL-JONES, Gregory J. APPLICANT: TSONIS, Con G. APPLICANT: TSONIS, Con G. APPLICANT: TSONIS, Con G. YITLE OF INVENTION: FUSION PROTEINS; NUMBER OF SEQUENCES: 47
CORRESPONDENCE ADDRESS:
                       ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           88.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 70.0
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-302-915-2
         CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 EHWSXGXXPG 10
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88.0%; Score 44; DB 1; Length 14; 70.0%; Pred. No. 0.06; tive 0; Mismatches 3; Indels
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| US-OT-690-983D-14
| Sequence 14, Application US/07690983D
| Patent No. 540386
| APPLICANT: RUSSELL-JONES, Gregory J. APPLICANT: STEWART. Andrew G. APPLICANT: TSONIS, CON G. TITLE OF INVENTION: FUSION PROTEINS
| VUMBER OF SEQUENCES: 47
| CORRESPENDINGE ADDRESS: ADDRESS: ADDRESSES: FOLSY & Laret, N.W. CITY: Washington, D.C. COUNTRY: Washington, D.C. COUNTRY: Washington, D.C. COUNTRY: BASHINGTON, D.C. COUNTRY: BASHINGTON, D.C. COUNTRY: BASHINGTON, D.C. COUNTRY: BASHINGTON, D.C. COMPUTER READABLE FORM:
| MEDIUM TYPE: Floppy disk COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/07/690,983D FILING DATE: 25-JUN-1991 |
| FILING DATE: 25-JUN-1991 |
| FLING DATE: 25-JUN-1991 |
| FLING DATE: 25-JUN-1991 |
| RUGISTRATION NUMBER: 16786/148 CHAC |
| TELERHONE: (202)672-5300 |
| TELERHONE: (202)672-5300 |
| TELERHONE: GRANTION NUMBER: INFORMATION: TELERHONE: CARACTERISTICS: LENGTH: APPLIANCE AND NOTE: SEQUENCE CHARACTERISTICS: LENGTH: APPLIANCE AND NOTE: SEQUENCE CHARACTERISTICS: LENGTH: APPLIANCE AND NOTE: LENGTH: APPLIANCE AND NOTE: LENGTH: LENGTH: APPLIANCE AND NOTE: LENGTH: LENGTH: APPLIANCE AND NOTE: LENGTH: APPLIANCE AND NOTE
              PAPELICATION NUMBER: US/07/690,983D
FILING DATE: 25-UN-1991
CLASSIFICATION: 435
PRIOR APPLICATION NUMBER: PCT/AU90/00373
FILING DATE: 24-AUG-1990
ATTORNEY/AGENT INFORMATION:
NAME: BENT, Stephen A.
REGISTRATION NUMBER: 16786/148 CHAC
FELECOMMUNICATION INFORMATION:
TELEFONE: (202)672-5309
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
LEMEYTH: 14 amino acid
TYPE: amino acid
TYPE: amino acid
TYPE: amino acid
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 70.0
Matches 7; Conservative
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY: linear

MOLECULE TYPE: protein
US-07-690-983D-30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 EHWSXGXXPG 10
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3Y: linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OMENTER: TSM PC Compatible
OPENATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
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US-07-690-983D-30
Sequence 30, Application US/07690983D
Parent No. 5403586
GENERAL INFORMATION:
APPLICANT: RISSELL-JONES, Gregory J. APPLICANT: STEWART, Andrew G. APPLICANT: TSONIS, Con G. TITLE OF INVENTION: FUSION PROTEINS NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS:
ADDRESSEE: FOLEY & Lardner.
        Sequence 26, Application US/07690983D
Sequence 26, Application US/07690983D
Patent No. 540386
GENERAL INFORMATION:
APPLICANT: STEWART, Andrew G.
APPLICANT: TSONIS, Con G.
CORRESPONDENCE ADDRESS:
ADDRESSEE: POLPY & Lardner
STREET: 3000 K Street, N.W.
CITY: Washington, D.C.
COUNTY: Washington, D.C.
CONPUTER REARABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: LBM PC COMPATIBLE
COMPUTER: LBM PC COMPATIBLE
COMPUTER: DEFERRED FORM:
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Best Local Similarity 70...
Ref. Local Similarity 70...
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TOPOLOGY: linear
MOLECULE TYPE: protein
US-07-690-983D-26
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                                                0; Gaps
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Query Match
Best Local Similarity 70.0%; Pred. No. 0.069;
Matches 7; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCIVEL.
CCIVITY: Washington, D.C.
CCIONTRY: Washington, D.C.
CCIONTRY: USA
ZIE: 20007-2109
ZIE: 20007-21109
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/690,983D
FILING DATE: 24-J091
ATDENEY/AGENT INFORMATION:
APPLICATION NUMBER: PCT/AU90/00373
FILING DATE: 24-J090
ATTORNEY/AGENT INFORMATION:
NAME: BETY, Stephen A.
REGISTRATION NUMBER: 16786/148 CHAC
TELEPHONE: (202)672-5399
INFORMATION: (202)672-5309
INFORMATION POR EGO ID NO: 16:
SEQUENCE CHARACTERISTICS:
LENGTH: 17 amino acids
TYPE: AMINO ACIDEN
US-07-690-983D-16
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                                                                                                                                                                                     RESULT 50
US-07-690-983D-16
isequence 16, Application US/07690983D
j Patent No. 5403566
igeneral information:
APPLICANT: RUSSELL-JONES, Gregory J. APPLICANT: STEWART, Andrew G. APPLICANT: TSONIS, Con G. TITLE OF INVENTION: FUSION PROTEINS NUMBER OF SEQUENCES: 47
CORRESPONDENCE PADRESS:
CORRESPONDENCE PADRESS:
STREET: 3000 K Street, N.W.
CITY: Washington, D.C.
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Best Local Similarity 70.0
Matches 7; Conservative
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Search completed: March 2, 2004, 19:28:55 Job time : 17 sec8

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| . 6<br>pugen Ltd.                                                                | Search time 27 Seconds (without alignments) 24 78.205 Million cell updates/sec           |                                                                   | B: 809742                                                                                                          | 38<br>39<br>80<br>40<br>40<br>40<br>40<br>40<br>40<br>40<br>40<br>40<br>40<br>40<br>40<br>40                            | 444  42/pubpaa/USO7_PUBCOMB.pep:*  4/2/pubpaa/USO6_TEMF PUB.pep:*  4/2/pubpaa/USO6_TEMF PUB.pep:*  4/2/pubpaa/USO6_TEMF PUB.pep:*  4/2/pubpaa/USO6_TEMF PUB.pep:*  4/2/pubpaa/USO6_TEMF PUB.pep:*  4/2/pubpaa/USO8_TEMF PUB.pep:*  4/4  4/4  4/4  4/4  4/7  4/4  4/4  4/ | ve a<br>printed,<br>tion                                                                                                                                                          | Sequence 28, Appl Sequence 1, Appli Sequence 3, Appli Sequence 30, Appl Sequence 30, Appl Sequence 31, Appli Sequence 31, Appli Sequence 7, Appli                                                                                                                                   |
| GenCore version 5.1<br>Copyright (c) 1993 - 2004 Com                             | OM protein - protein search, using sw model Run on: March 2, 2004, 19:25:48; Sear; (with | •                                                                 | Gapop 10.0 , Gapext 0.5 Searched: 809742 segs, 211153259 residues Total number of hits satisfying chosen parameter | Minimum DB seq length: 0 Maximum DB seq length: 200000000 Post-processing: Minimum Match 0% Listing first 500 summaries | ad Applica<br>2 - 6/ptodatt<br>2 - 6/ptodatt                                                                                                                                                                                                                                                                                                                                                                                                                                | Pred. No. is the number of results predic score greater than or equal to the score and is derived by analysis of the total s summaries  Result Query No. Score March Length DB ID | 2 44 88.0 10 10 US-09-964-201A-<br>2 44 88.0 10 13 US-10-118-126-13<br>4 44 88.0 10 14 US-10-117-364-13<br>6 44 88.0 10 14 US-10-117-364-13<br>6 44 88.0 10 14 US-10-311-608-4<br>8 44 88.0 10 15 US-09-964-201A-<br>11 44 88.0 20 10 US-09-964-201A-<br>12 44 88.0 20 10 US-09-964-201A-<br>13 44 88.0 20 10 US-09-964-201A-<br>14 88.0 27 14 US-10-76-674-7<br>15 44 88.0 27 14 US-10-76-674-7<br>15 44 88.0 27 14 US-10-76-674-7 |

Sequence 8, Appli Sequence 9, Appli Sequence 22, Appli Sequence 13, Appli Sequence 1303, Appli Sequence 1303, Appli Sequence 1303, Appli Sequence 1173, Appli Sequence 1178, Appli Sequence 1173, Appli Sequence 126, Appli Sequence 136, Appli Sequence 136, Appli Sequence 117, Appli Sequence 118, Appli Sequence 117, Appli Sequence 118, Appli Sequence 21, Appli Sequence 22, Appli Sequence 23, Appli Sequence 23, Appli Sequence 24, Appli Sequence 250, Appli Sequence 250, Appli Sequence 27, Appli Sequence 27, Appli Sequence 27, Appli Sequence 27, Appli us-09-857-115-7.rapb

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| Sequence 15, Appl<br>Sequence 15, Appl<br>Sequence 36040, A<br>Sequence 126, App                                                                   | equence 16<br>equence 17                                                                                   | equence 17                                                                      | equence 19<br>equence 20                                                     | equence 20                            | Sequence 1517, Ap<br>Sequence 1609, Ap | Sequence 1747, Ap                    | Sequence 1760, Ap                     | Sequence 1963, Ap                     | Sequence 2029, Ap                     | Sequence 2042, Ap                     | Sequence 1517, Ap                     | Sequence 1747, Ap                     | Sequence 1760, Ap                                    | Sequence 1944, Ap                      | de toot and | Seguence 2042, Ap                    | Sequence 1517, Ap                         | Sequence 1609, Ap                    | Sequence 1747, Ap                        | Sequence 1760, Ap                       | Sequence 1944, Ap                    | Sequence 1963, Ap                                                                                   | Sequence 2029, Ap                                                         | Sequence 2042, Ap                    | Sequence 958, App                                     | Sequence 4777, Ap                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               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           | Sequence 34, Appl                    | Sequence 34, Appl                    | Sequence 4415, Ap                    | Sequence 13, App.                    | Company App                          | Semience 3. Appli                        | Sequence 2, Appli                         | Sequence 44, Appl                     | ωī                                      | ö                                      | χ,                                     | Sequence 8543, Ap                      | ۰                                     |                                       |                                       |                                         | ٠ ٧                                 | ρv                                   | ρč                                    | õõ                                    | 0                                        |
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| US-10-617-561-16<br>US-10-617-561-15<br>US-09-864-761-36040<br>US-09-879-957-126                                                                   | US-09-796-692-1917<br>US-09-796-692-1609<br>US-09-796-692-1747                                             | 96-692-176                                                                      | 96-692-196                                                                   | US-09-796-692-204                     | .040-862-15<br>.040-862-15             | US-10-040-862-17                     | US-10-040-862-17                      | US-10-040-862-19                      | US-10-040-862-20                      | US-10-040-862-2042                    | US-10-057-475B-151                    | US-10-057-475B-174                    | US-10-057-475B-1                                     | US-10-057-475B-194                     | US-IU-US/-4/5B-196                              | US-10-05/*4/5B-202                   | US-10-03/-4/3B-204<br>IIS-10-154-884B-151 | US-10-154-884B-160                   | US-10-154-884B-174                       | US-10-154-884B-176                      | US-10-154-884B-194                   | US-10-154-884B-196                                                                                  | .US-10-154-884B-202                                                       | US-10-154-884B-204                   | 13-(                                                  | ns                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       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|                                                                                                                                                    |                                                                                                            |                                                                                 |                                                                              | ע סי                                  | 44.6                                   | -                                    | Η,                                    | ٦.                                    | -                                     | П.                                    |                                       | 1 1-1                                 | -                                                    | ***                                    | _ '                                             | 7 -                                  |                                    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| 1 M M M I                                                                                                                                          | , , , ,                                                                                                    | 2.0                                                                             |                                                                              | 7.5                                   | 2, 7                                   | . 27                                 | ~ ;                                   | . ,                                   | 7.                                    | ři                                    |                                       |                                       | 7                                                    | ř.                                     | r i                                             |                                      | , ,                                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| 162<br>163<br>164<br>165                                                                                                                           | 167                                                                                                        | 0 6 6                                                                           | 171                                                                          | 173                                   | 174                                    | 176                                  | 177                                   | 178                                   | 180                                   | 181                                   | 182                                   | T 100                                 | 182                                                  | 186                                    | 187                                             | 188                                  | 900                                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|                                                                                                                                                    |                                                                                                            |                                                                                 |                                                                              |                                       |                                        |                                      |                                       |                                       |                                       |                                       |                                       |                                       |                                                      |                                        |                                                 |                                      |                                    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| Sequence 31, Appl<br>Sequence 1, Appli<br>Sequence 127, App<br>Sequence 145, App                                                                   |                                                                                                            |                                                                                 | Sequence                                                                     | equence 1                             | Sequence 3, Appli                      | eguence 4<br>Segnence                | Sequence 23, Appl                     | Sequence 25, Appl                     | Sequence 30, Appl                     | Sequence 143, App                     | Sequence 144, App                     | Sequence 160, App                     | Sequence 11, Appi<br>Sequence 9, Appli               | Sequence 12, Appl                      | Sequence 10, Appl                               | Sequence 6, Appli                    | Sequence 8, Appli                         | Sequence 2, Appli                    | Sequence 31420, A                        | Sequence also, Ap                       | Sequence 6. Appli                    | Segments 12893. A                                                                                   | Semence 1. Appli                                                          | Sequence 1, Appli                    | equence ,                                             | Semianor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 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| US-10-170-096A-31 Sequence US-10-354-433-1 Sequence US-10-360-101-127 Sequence US-10-360-101-145 Sequence                                          | US-10-264-237-1426 Sequence US-10-321-204-51 Sequence                                                      | US-10-108-260A-2504 Sequence<br>JS-09-772-316-1 Sequence 1                      | US-10-600-058-1 Sequence<br>US-10-132-134-34 Sequence                        | US-09-848-834A-1<br>IS-09-810-601-2   | US-09-810-601-3 Sequence               | US-09-810-601-4 Sequence 4           | US-10-170-096A-23 Sequence            | US-10-170-096A-25 Sequence            | US-10-170-096A-30 sequence            | US-10-360-101-143 Sequence            | US-10-360-101-144 Sequence            | US-10-360-101-160 Sequence            | US-09-848-834A-11<br>US-09-848-834A-9 Sequence 3     | US-09-848-834A-12 Sequence 1           | US-09-848-834A-10 Seguence 1                    | US-10-170-096A-6 Sequence            | US-10-170-096A-8 Sequence                 | US-10-170-096A-2 Sequence            | US-10-029-386-31420 Sequence             | US-10-156-761-8196 sequence             | US-IO-IX8-Z/9-6 Sequence             | 13-10-156-909-6 Sequence                                                                            | 110 - 10 - 10 - 10 - 10 - 10 - 10 - 10                                    | 118-09-822-662-1 Sequence            | 118-09-322-332-1                                      | 450441E48                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 02-03-835-606-2              | US-10-109-331-4 sequence            | OS-IO-IOS-ST-5                       | US-IO-170-0368-28 Sequence                                        | US-10-1/0-096A-28 Sequence            | US-10-1/0-0964-32                     | US-IU-I/U-UV6A-33 Sequence            | 110 - 10 - 10 - 10 - 10 - 10 - 10 - 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 110-10-360-101-13/ CGGCCCC                   | 40000000000000000000000000000000000000   | 110 - 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| 15 US-10-170-096A-31 Sequence<br>15 US-10-354-433-1 Sequence<br>15 US-10-360-101127 Sequence<br>15 US-10-360-101-145 Sequence                      | 15 US-10-264-237-1426 Sequence 14 US-10-321-204-51 Sequence                                                | 15 US-10-108-280A-2304 Sequence 9 US-09-772-316-1 Sequence 1                    | 15 US-10-600-058-1 Sequence<br>14 US-10-132-134-34 Sequence                  | 9 US-09-848-834A-1 Sequence 1         | 9 US-09-810-601-3 Sequence             | 9 US-09-810-601-4 Sequence 4         | 15 US-10-170-096A-23 Sequence         | 15 US-10-170-096A-25 Sequence         | 15 US-10-170-096A-30 Sequence         | 15 US-10-360-101-143 Sequence         | 15 US-10-360-101-144 Sequence         | 15 US-10-360-101-160 Sequence         | 9 US-09-848-834A-11<br>9 US-09-848-834A-9 Sequence 9 | 9 US-09-848-834A-12 Sequence 1         | 9 US-09-848-834A-10 Sequence 1                  | 15 US-10-170-096A-6 Sequence         | 15 US-10-170-096A-8 Sequence              | 15 US-10-170-096A-2 Sequence         | 14 US-10-029-386-31420 Sequence          | 14 US-10-156-761-8196 sequence          | 14 US-10-128-279-6 Sequence          | 14 US-10-288-808-8<br>14 118-10-156-761-10883 Semiende                                              | L4 US-10-130-701-12033 Sequence<br>o ms-00-134-377-1                      | 9 11S-09-822-662-1 Sequence          | 9 TIS-09-147-346-4 Segmence                           | 11 110 DO 12 TO 12 | TI 08-03-838-909-7           | 13 US-10-109-331-4 sequence         | 13 US-IO-IOS-331-3 Sequence          | 15 US-110-170-030A-20 Sequence                                    | 15 US-IO-1/U-096A-28 Sequence         | 15 US+IO-1/U-U96A-52 Sequence         | 15 US-IU-1/U-096A-33 sequence         | 15 US-10-560-101-116 Segrence                                                                                                                                                                                                                  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| 15 US-10-170-096A-31 Sequence<br>15 US-10-354-433-1 Sequence<br>15 US-10-356-101-127 Sequence<br>15 US-10-360-101-145 Sequence                     | 15 US-10-264-237-1426 Sequence 14 US-10-321-204-51 Sequence                                                | 508 15 US-10-108-260A-2504 Sequence 502 9 US-09-772-316-1 Sequence 1            | 15 US-10-600-058-1 Sequence<br>14 US-10-132-134-34 Sequence                  | 9 US-09-848-834A-1 Sequence 1         | 9 US-09-810-601-3 Sequence             | 9 US-09-810-601-4 Sequence 4         | 15 US-10-170-096A-23 Sequence         | 15 US-10-170-096A-25 Sequence         | 15 US-10-170-096A-30 Sequence         | 15 US-10-360-101-143 Sequence         | 15 US-10-360-101-144 Sequence         | 15 US-10-360-101-160 Sequence         | 9 US-09-848-834A-11<br>9 HS-09-848-834A-9 Sequence 9 | 9 US-09-848-834A-12 Sequence 1         | 9 US-09-848-834A-10 Sequence 1                  | 15 US-10-170-096A-6 Sequence         | 15 US-10-170-096A-8 Sequence              | 15 US-10-170-096A-2 Sequence         | 14 US-10-029-386-31420 Sequence          | 14 US-10-156-761-8196 sequence          | 14 US-10-128-279-6 Sequence          | 14 US-10-288-808-8<br>14 118-10-156-761-10883 Semiende                                              | L4 US-10-130-701-12033 Sequence<br>o ms-00-134-377-1                      | 9 11S-09-822-662-1 Sequence          | 9 TIS-09-147-346-4 Segmence                           | 11 110 DO 12 TO 12 | TI 08-03-838-909-7           | 13 US-10-109-331-4 sequence         | 13 US-IO-IOS-331-3 Sequence          | 15 US-110-170-030A-20 Sequence                                    | 15 US-IO-1/U-096A-28 Sequence         | 15 US+IO-1/U-U96A-52 Sequence         | 15 US-IU-1/U-096A-33 sequence         | 15 US-10-560-101-116 Segrence                                                                                                                                                                                                                  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115-09-916-940-89 Secrence | 9 11S-09-758-426-53 Sequence         | 9 IIS-09-758-198-53 Sequence         | 10 US-09-861-661-53 Sequence         | 14 US-10-096-550-89 Sequence         | 15 US-10-375-913-14 Sequence         | 9 US-09-864-761-35060 Sequence           | 15 US-10-369-493-4987 Sequence            | 14 US-10-021-723A-6 Sequence          | 9 US-09-815-242-10441 sequence          | 14 US-10-114-048-2                     | 14 US-10-071-894-6 Sequence            | 14 US-10-112-8/4-5 Sequence            | 14 US-10-112-674-2 Sequence           | 14 US-10-039-761-4 Sequence           | 14 US-10-112-674-4 Sequence           | 15 US-10-116-275-244 Sequence           | 13 US-10-054-552-1 Sequence         | 14 US-10-278-364A-9 Sequence         | 15 US-10-181-638A-11 Sequence         | 15 US-10-360-101-137 Sequence         | 15 118-10-360-101-308 Sequence           |
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15 US-10-369-493-14179 Sequence 14.<br>), 0 305 16 US-10-038-854-105 Sequence 10:     | ), 0 308 14 US-10-017-161-768 Sequence 766                               | 0.0 340 10 US-09-769-734-58 Sequence 58 | ).0 341 15 US-10-334-143-74 Sequence 74,<br>2.0 342 14 US-10-092-135-2 Sequence 2,       | .0 342 14 US-10-223-085-28 Sequence 28   | 7.0 342 14 US-10-223-084-28 Sequence 28,                                            | .0 342 14 US-10-223-090-28 Sequence 28, 0 342 14 US-10-223-087-28 Sequence 28,        | 342 14 US-10-223-083-28 Sequence 28      | 342 14 US-10-223-081-28 Sequence 28      | ),0 342 14 US-10-223-082-28 Sequence 28,                               | 0.0 346 9 US-09-942-374-2 Sequence 2, 1  | ).0 346 10 US-09-886-041-2 Sequence 2,                                     | ).0 346 14 US-10-094-417-8 Sequence 8,  | 0.0 346 14 US-10-188-149A-2 Sequence 18<br>0.0 346 14 US-10-079-384-18 Sequence 18 | 346 14 US-10-240-842-2 Sequence 2,        | 7.0 346 14 US-10-225-36/A-668 Sequence 30.0 346 14 US-10-201-481-7 Sequence 7, | ).0 346 14 US-10-278-141-3 Sequence 3,    | ).0 346 14 US-10-321-807-24 Sequence 24                                  | 0.0 346 14 US-10-044-643-2 Sequence 2,    | 0.0 346 14 US-10-044-643-5 Sequence 5,    | 3.0 346 IS US-10-236-081-3<br>0.0 346 IS US-10-369-493-11556 Sequence 11       | 0.0 346 15 US-10-369-493-14593 Sequence 14    | 0.0 346 15 US-10-369-493-14961 Sequence 14<br>0.0 354 9 US-09-738-626-6529 Sequence 652 | 0.0 377 10 US-09-967-237-87 Sequence 87, A    | 0.0 380 14 US-10-017-161-2010 Sequence 2010<br>0.0 380 15 US-10-292-798-1656 Sequence 1656    |
| .0 1331 16 US-10-311-623-7 Sequence 7, .0 1464 9 US-09-466-390-2 Sequence 2, P. 0 1464 15 US-10-607-095-21 Sequence 21, .0 19695 15 US-10-084-846A-3 Sequence 3, .0 747 9 US-09-874-069-6 Sequence 6, P. 0 98 9 US-09-746-945-2 Sequence 4, P. 0 9 9 US-09-746-945-2 Sequence 2, P. 0 9 9 US-09-746-945-2 Sequence 2, P. 0 9 US-09-746-946-945-2 Sequence 2, P. 0 9 US-09-746-946-946-946-946-946-946-946-946-946-9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 60.0 9 9 US-09-146-949-2 Sequence 1.4 60.0 10 15 US-10-360-101-114 Sequence 114 60.0 10 15 US-10-360-101-154 Sequence 154 60.0 18 14 US-10-25-5678-2244 Sequence 224 Commence 225-5678-2244 Sequence 224 Commence 224 Comm | 60.0 44 9 US-09-864-761-4209/ Sequence 4z, 60.0 88 11 US-09-833-645-293 Sequence 26, 60.0 91 9 US-09-867-550-910   | 60.0 92 15 US-10-170-096A-4 Sequence 4,                                   | 60.0 96 9 US-10-091-548-57 Sequence 57, 60.0 96 14 US-10-091-548-57 Sequence 57 | 60.0 96 14 US-10-074-095-575 Sequence 57 | 60.0 170 9 US-09-72-719-54 Sequence 54<br>60.0 0 0 118-09-734-717-19 Semience 19 | 60.0 205 14 US-10-185-567-19 Sequence 10 | 60.0 222 14 US-10-238-075-587 Sequence 50 224 14 US-10-156-761-11958 Sequence 17 | 60.0 227 10 US-09-934-455-100 Sequence 100 | 60.0 227 15 US-10-225-068-58 Sequence 58, | 60.0 253 15 US-10-369-493-10635 Sequence 106              | 60.0 256 9 US-09-772-719-51 Sequence 51, | 60.0 270 15 US-10-421-138A-118 Sequence 118, Ap | ) 60.0 283 14 US-10-156-761-8768 Sequence 8768, A                             | 60.0 296 10 US-09-782-974C-12 Sequence 12. | ) 60.0 300 15 US-10-369-493-14179 Sequence 14.<br>) 60.0 305 16 US-10-038-854-105 Sequence 10: | 60.0 308 14 US-10-017-161-768 Sequence 76                                | 60.0 340 10 US-09-784-58 Sequence 58    | ) 60.0 341 15 US-10-334-143-74 Sequence 74,<br>) 60.0 342 14 US-10-092-135-2 Sequence 2, | 60.0 342 14 US-10-223-085-28 Sequence 28 | 60.0 342 14 US-10-223-084-28 Sequence 28, 60.0 342 14 US-10-223-088-28 Sequence 28, | ) 60.0 342 14 US-10-223-090-28 Sequence 28, 60.0 342 14 US-10-223-087-28 Sequence 28, | 60.0 342 14 US-10-223-083-28 Sequence 28 | 60.0 342 14 US-10-223-081-28 Sequence 28 | ) 60.0 342 14 US-10-223-082-28 Sequence 28                             | 60.0 346 9 US-09-942-374-2 Sequence 2, 1 | ) 60.0 346 10 US-09-886-041-2 Sequence 2,                                  | 60.0 346 14 US-10-094-417-8 Sequence 8, | ) 60.0 346 14 US-10-186-145A-2 Sequence 2,                                         | 5 60.0 346 14 US-10-240-842-2 Sequence 2, | 50.0 346 14 US-10-225-56/A-668 Sequence of US-10-201-481-7 Sequence 7,         | 5 60.0 346 14 US-10-278-141-3 Sequence 3, | 0 60.0 346 14 US-10-321-807-24 Sequence 24 Consequence 24 Consequence 2. | 5 60.0 346 14 US-10-044-643-2 Sequence 2, | 0 60.0 346 14 US-10-044-643-5 Sequence 5, | 0 60.0 346 15 US-10-296-081-3<br>0 60.0 346 15 US-10-369-493-11556 Sequence 11 | 0 60.0 346 15 US-10-369-493-14593 Sequence 14 | 0 60.0 346 15 US-10-369-493-14961 Sequence 14                                           | 0 60.0 377 10 US-09-967-237-87 Sequence 87, A | 0 60.0 380 14 US-10-017-161-2010 Sequence 2010 0 60.0 380 15 US-10-292-798-1656 Sequence 1656 |

| Sequence 2, Appli<br>Sequence 6, Appli<br>Sequence 8605, Ap<br>Sequence 3356, Ap<br>Sequence 5, Appli<br>Sequence 55, Appli<br>Sequence 1, Appli<br>Sequence 1, Appli                                       | Sequence 10, Appl<br>Sequence 10, Appl<br>Sequence 2876, Ap<br>Sequence 10688, A<br>Sequence 10531, A<br>Sequence 17162, A | Sequence 184, App<br>Sequence 7132, Ap<br>Sequence 7132, Ap<br>Sequence 2, Appli<br>Sequence 17280, A<br>Sequence 17280, A<br>Sequence 4341, Ap  | Sequence 4407, Ap<br>Sequence 7163, Ap<br>Sequence 901, App<br>Sequence 14754, A<br>Sequence 7854, Ap<br>Sequence 7854, Ap<br>Sequence 9999, Ap                      | Sequence 3319, Ap<br>Sequence 14013, A<br>Sequence 14013, Ap<br>Sequence 7698, Ap<br>Sequence 14106, A<br>Sequence 8333, Ap<br>Sequence 702, App<br>Sequence 1388, App |                                                                                                                                                                                        | YSTEM<br>1575A1 09\026,276                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
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| 10 US-09-986-118A-2<br>15 US-10-367-095-6<br>15 US-10-369-493-8605<br>13 US-10-369-493-3156<br>13 US-10-324-623-5<br>14 US-10-154-419-55<br>14 US-10-146-733-50<br>10 US-09-91-053-1<br>14 US-10-301-260A-1 | US-1<br>US-1<br>US-1<br>US-1                                                                                               | US-09<br>US-08-1<br>US-08-1                                                                                                                      |                                                                                                                                                                      |                                                                                                                                                                        | 16 US-10-389-566-802<br>14 US-10-011-366-6<br>15 US-10-354-74-6<br>10 US-09-365-738-146<br>10 US-99-955-738-162<br>11 US-10-084-846A-5<br>15 US-10-084-846A-4<br>14 US-10-106-698-5904 | SA E MONDE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
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| Sequence 4315, Ap<br>Sequence 1766, Ap<br>Sequence 2374, Ap<br>Sequence 1617, Ap<br>Sequence 2816, Ap<br>Sequence 2816, App<br>Sequence 2816, App<br>Sequence 4579, Ap                                      | Sequence 2532, Ap Sequence 1999, A Sequence 30, Appl Sequence 43, Appl Sequence 43, Appl Sequence 12173, A                 | Sequence 1182, Ap<br>Sequence 753, App<br>Sequence 355, App<br>Sequence 471, App<br>Sequence 355, App<br>Sequence 202, App<br>Sequence 265, App  | Sequence 3505, Ap<br>Sequence 12345, A<br>Sequence 12345, A<br>Sequence 118, App<br>Sequence 1141, Ap<br>Sequence 1141, Ap<br>Sequence 1419, Ap<br>Sequence 690, App | Sequence 23, Appl<br>Sequence 2, Appli<br>Sequence 2, Appli<br>Sequence 11351, A<br>Sequence 11107, A<br>Sequence 2955, Ap<br>Sequence 2164, Ap<br>Sequence 2164, Ap   | Sequence 396, App<br>Sequence 396, App<br>Sequence 296, App<br>Sequence 492, App<br>Sequence 8365, Ap<br>Sequence 9813, Ap<br>Sequence 1165, Ap<br>Sequence 10851, Ap                  | Sequence 3653, Ap. Sequence 22497, Ap. Sequence 12497, Appl Sequence 14, Appl Sequence 14, Appl Sequence 1651, Appl Sequence 1651, Appl Sequence 555, Appl Sequence 555, Appl Sequence 189, Appl Sequence 659, Appl Sequence 1812, Appl Sequence 18129, Appl Sequence 19128, Appl Sequence 19128, Appl Sequence 19128, Appl Sequence 3, Appl Sequence 4, Appl Sequence 5, Appl Sequence 5, Appl Sequence 5, Appl Sequence 6, Appl Sequence 6 |
| US-10-106-698-4315 US-09-833-245-1766 US-09-833-245-1766 US-09-925-300-1617 US-09-864-408-6950 US-09-866-408-6950 US-09-860-670-140 US-09-860-670-140                                                       | US-10-264-237-2532<br>US-10-36-493-19999<br>US-09-997-003-30<br>US-09-997-003-43<br>US-10-156-761-12173                    | US-09-925-301-1182<br>US-09-925-297-753<br>US-09-764-870-355<br>US-09-764-853-471<br>US-10-125-540-355<br>US-10-103-313-302<br>US-10-158-057-285 | US-10-264-049-3505<br>US-10-156-761-12345<br>US-10-294-444-1<br>US-09-374-046A-158<br>US-09-933-767-1141<br>US-10-023-282-1141<br>US-09-866-050A-699                 | US-10-441-626-23<br>US-10-003-759-2<br>US-10-26-911-2<br>US-10-156-761-11351<br>US-10-156-761-11107<br>US-10-108-260A-3955<br>US-10-017-161-2164<br>US-10-292-798-1810 | SU S                                                                                                                                               | US-09-138-6-26-9-5-6 US-10-104-047-3653 US-10-369-493-22497 US-10-006-212-14 US-10-074-566-14 US-10-074-566-78 US-10-074-566-78 US-10-074-566-78 US-09-882-171-555 US-09-882-171-555 US-09-882-171-555 US-09-882-171-555 US-09-882-171-555 US-09-882-171-555 US-10-369-493-18329 US-10-168-2604-237-2641 US-10-168-65-12 US-10-369-493-19128 US-10-369-493-19128 US-10-369-493-19128 US-10-369-493-19128 US-10-224-993A-3469 US-09-162-904A-3 US-09-162-904A-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
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TITLE OF INVENTION: LHRH Antagonist Peptides
FILE REFERENCE: PPI-007CPUS
CURRENT APPLICATION NUMBER: US/10/117,364
CURRENT FILING DATE: 2002-04-05
PRIOR APPLICATION NUMBER: BARLIER APPLICATION NUMBER: US/08/973,376
PRIOR FILING DATE: BARLIER FILING DATE: 1998-04-06
PRIOR FILING DATE: BARLIER PILING DATE: 1995-06-07
NUMBER OF SEQ ID NOS: 1
SOFTWARE: PATCHIN VET. 2.0
SEQ ID NO 1
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                                                                              Score 44; DB 14; Length 10;
Pred. No. 0.31;
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                                                                                                                                                                                                                                                                                                          Sequence 1. Application US/10122483

Sequence 1. Application US/10122483

Publication No. US20030044936A1

GENERAL INFORMATION:

APPLICANT: Hang, Jaulang

APPLICANT: Ting, Chun-Jen

TITLE OF INVENTION: PEPTIDE REPEAT IMMUNOGENS

FILE REFERENCE: 08919-071001

CURRENT APPLICATION NUMBER: US/10/122,483

CURRENT APPLICATION NUMBER: 09/412,558

PRIOR FILING DATE: 1999-10-05

NUMBER OF SEQ ID NOS: 13

SOFTWARE: FESTSEQ for Windows Version 4.0

SEQ ID NO 1

LENGTH: 10
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; Publication No. US20030181385A1
; GENERAL INFORMATION:
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Best Local Similarity 70...
7, Conservative
                                                                                   Query Match
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Matches 7; Conservative
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CRGANISM: Homo sapiens
US-10-117-364-1
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ORGANISM: Homo sapiens
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-115-553-1
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US-10-117-364-1
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US-10-122~483-1
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; Publication No. US2003040482A1
; GENERAL INFORMATION:
   APPLICANT: Roeske, Roger W.
   ATITLE OF INVENTION: LHRH Antagonist Peptides
   FILE REPERENCE: PPL-007-094
; FILE REPERENCE: PPL-007-094
; FULE REPERENCE: PRI-007-094
; FULE REPERENCE: BARLIER FILING DATE: 2002-04-02
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 08/480,494
; PRIOR PILING DATE: EARLIER FILING DATE: 1998-04-06
; PRIOR FILING DATE: EARLIER FILING DATE: 1995-06-07
; NUMBER OF SEQ ID NOS: 1
; SOFTWARE: PATEURING DATE: 2.0
; SEQ ID NO : SEQ ID NOS: 1
; LENGTH: 10
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Pred. No. 0.31;
0; Mismatches 3; Indels
                         DB 10; Length 10; 0.31;
                                                                     3; Indels
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LOCATION: (1). (1). (1)
OTHER INFORMATION: Glu is modified with a pyro group.
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! LOCATION: (10)...(10)
! OTHER INFORMATION: Gly is modified with -NH2 group
US-10-184-126-1
                                                                                                                                                                                                                                                                                                                                               APPLICANT: ZHAO, Xuan
APPLICANT: ZHAO, Xuan
APPLICANT: EHAO, Xuan
APPLICANT: BENTLEY, Michael D.
TITLE OF INVENTION: PEG-LHRH ANALOG CONJUGATES
FILE REPERRENCE: EL-TATAR-ZA
CURRENT APPLICATION NUMBER: US/10/184,126
CURRENT APPLICATION NUMBER: US/09/698,134
PRIOR APPLICATION NUMBER: US/09/698,134
PRIOR FILING DATE: 2000-10-30
PRIOR FILING DATE: 1998-04-28
PRIOR RILING DATE: 1998-04-28
NUMBER: OF SEG ID NOS: I
SOFTWARE: PATENTIN VERSION 3.1
SOFTWARE: PATENTIN VERSION 3.1
SEG ID NO: TENTING 10
                       88.0%; Score 44; DB nilarity 70.0%; Pred. No. 0.31 Conservative 0; Mismatches
                                                                                                                                                                                                                                            US-10-184-126-1
; Sequence 1, Application US/10184126
; Publication No. US-20020183257A1
; GRIERAL INFORMATION:
; APPLICANT: EL TAYAR, Nabil
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Local Similarity 70.0%;
nes 7; Conservative C
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ORGANISM: Artificial Sequence
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                                                                                                                 1 EHWSXGXXPG 10
                              Query Match
Best Local Similarity
Matches 7; Conserv
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Publication No. US20040023867A1

GENERAL INFORMATION:
APPLICANT: Daniels, AnnaMarie
APPLICANT: Daniels, AnnaMarie
APPLICANT: Pike, Malcolm
APPLICANT: Bajer, Dancy
ITTLE OF INVENTION: Methods and Compositions for Treating
ITTLE OF INVENTION: Methods and Compositions for Treating
ITTLE OF INVENTION: Methods and Compositions
CURRENT APPLICATION NUMBER: US.001.0200

CURRENT APPLICATION NUMBER: US.002-11-15
PRIOR PRILING DATE: 2002-08-02

NUMBER OF SEQ ID NOS: 4

SOFTWARR: FastSEQ for Windows Version 4.0

SEQ ID NO 1

LENGTH: 10
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                                                  APPLICANT: Datels, John
APPLICANT: Datels, John
APPLICANT: Datels, Malcolm
APPLICANT: Datels, Malcolm
APPLICANT: Spicer, Datels
APPLICANT: Datels, Annaharie
TITLE OF INVENTION: Nasal Spray Formulation and Method
FILE REFERENCE: 3891.8002.USO
CURRENT APPLICATION NUMBER: US/10/298,378
CURRENT FILING DATE: 2002-11-15
FRIOR FILING DATE: 2002-08-02
NUMBER OF SEQ ID NOS: 4
SOFTWARE: PastSEQ for Windows Version 4.0
LENGTH: 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; LOCATION: 10
; OTHER INFORMATION: amino acid linked to NH2
v. 10-298-378-1
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Publication No. US20040022739A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: Synthetic
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Best Local Similarity 70.0%
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Best Local Similarity 70.0
Matches 7; Conservative
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                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: VARIANT
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US-10-298-851-1
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Squence 1, Application US/10353160A
Publication No. US20040010033A1
GENERATION. No. US20040010033A1
APPLICANT: Agouron Pharmaceuticals, Inc./A Pfizer Company
TITLE OF INVENTION: No. US20040010033A1-Peptide GnRH Agents, Methods And Intermediate
FILE REFERENCE: 0059-02-03
CURRENT APPLICATION NUMBER: US/10/353,160A
CURRENT FILING DATE: 2003-01-27
PRIOR APPLICATION NUMBER: 09/763,216
PRIOR APPLICATION NUMBER: 60/097,520
PRIOR PLICATION NUMBER: 60/097,520
PRIOR FILING DATE: 1998-08-20
NUMBER OF SEQ ID NOS: 1
SOFTWARE: PatentIn version 3.1
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US-10-353-160A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
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88.0%; Score 44; DB 15; Length 10;

Best Local Similarity 70.0%; Pred. No. 0.31;

Matches 7; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                               GENERAL INFORMATION:

APPLICANT: Yamanouchi Pharmaceutical Co., Ltd.

TITLE OF INVENTION: PROPANE-1,3-DIONE DERIVATIVE
FILLE REFERENCE: 073475
FILLE REFERENCE: 073475
CURRENT FILING DATE: 2002-12-19
PRIOR PILING DATE: 2002-12-19
PRIOR PILING DATE: 2000-07-05
PRIOR PILING DATE: 2001-05-23
PRIOR FILING DATE: 2001-05-23
PRIOR FILING DATE: 2001-05-23
NUMBER OF SEQ ID NOS: 4
SOFTWARE: PATCHING DATE: 2001-05-23
NUMBER OF SEQ ID NOS: 4
SOFTWARE: PATCHING DATE: 2001-05-23
NUMBER OF SEQ ID NOS: 4
SOFTWARE: PATCHING DATE: 2001-05-23
NUMBER OF SEQ ID NOS: 4
SOFTWARE: PATCHING DATE: 2001-05-23
NUMBER OF SEQ ID NOS: 4
SOFTWARE: PATCHING DATE: 2001-05-23
NUMBER OF SEQ ID NOS: 4
SOFTWARE: PATCHING DATE: 2001-05-23
NUMBER OF SEQ ID NOS: 4
SOFTWARE: PATCHING DATE: 2001-05-23
NUMBER OF SEQ ID NOS: 4
SEQ ID NO 4
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US-10-298-378-1
; Sequence 1, Application US/10298378
                                                                                                                Sequence 4, Application US/10311688
Publication No. US20030191164A1
GENERAL INFORMATION:
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Best Local Similarity 70.v7
Best Local 7; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JS-10-353-160A-1
                                                                                       US-10-311-688-4
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RESULT 7

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APPLICANT: Kenten, John H
APPLICANT: Tramontano, Alfonso
APPLICANT: Tramontano, Alfonso
APPLICANT: Tramontano, Alfonso
APPLICANT: Tramontano, Alfonso
APPLICANT: Lohnas, Gerald L
APPLICANT: Roberts, Steven F
TILLE OF INVENTION: HEAT-SHOCK FUSION-BASED VACCINE SYSTEM
CURRENT APPLICATION NUMBER: US/09/964,201A
NUMBER OF SEQ ID NOS: 35
SOFTWARE: PATENTIN Ver. 2.0
IENGTH: 20
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TITLE OF INVENTION: HEAT-SHOCK FUSION-BASED VACCINE SYSTEM FILE REPERENCE: U.S. Patent Application No. US20030091575A1 09\026,276 CURRENT APPLICATION NUMBER: US/09/964,201A CURRENT PILING DATE: 2002-05-21 NUMBER OF SEQ ID NOS: 35 SOFTWARE: PatentIn Ver. 2.0 SEQ ID NO 30 LENGTH: 20
                                                                                                                                                                                                                                                                              Gaps
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Publication No. US20030165478A1
GENERAL INFORMATION:
APPLICANT: SOKoll, Kenneth K.
TITLE OF INVENTION: Stabilized Synthetic Immunogen Delivery System
TITLE REFERENCE: Immunogen Delivery System
CURRENT APPLICATION NUMBER: US/10/076,674
CURRENT FILE NOS: 11
SOFTWARE: Patentin version 3.1
SEQ ID NOS: 11
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Pred. No. 0.58;
0; Mismatches 3; Indels
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Pred. No. 0.76;
0; Mismatches 3; Indels
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Pred. No. 0.58;
0; Mismatches 3; Indels
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70.0%;
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Best Local Similarity 70.0
Matches 7; Conservative
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Best Local Similarity 70.0
Matches 7; Conservative
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Best Local Similarity 70.0
Matches 7; Conservative
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                                                                                                                                                               TYPE: PRT
ORGANISM: Porcine
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ORGANISM: Porcine
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US-10-076-674-7
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US-10-076-674-7
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Sequence 3, Application US/09305924A;
Publication No. US20030091579A1
September 1 in FORMATION:
APPLICANT: Stephen D. Acres
APPLICANT: Stephen D. Acres
APPLICANT: Stephen D. Acres
ITLE OF INVENTION: WETHOUS OF RAISING ANIMALS FOR MEAT PRODUCTION
FILE REFERENCE: 9001-0048
CURRENT APPLICATION WINBER: US/09/305,924A
CURRENT APPLICATION UNBER: US 60/084,217
EARLIER APPLICATION UNBER: US 60/084,217
EARLIER FILING DATE: 1998-05-05
NUMBER OF SEQ ID NOS: 14
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO3:
SER ID NO3:
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Pred. No. 0.58;
0; Mismatches
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Pred. No. 0.5;
0; Mismatches
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Publication No. US20030091575A1

GENERAL INPORMATION:

APPLICANT: Tramontano, Alfonso

APPLICANT: Tramontano, Alfonso

APPLICANT: Pilon, Aprile L

APPLICANT: Pohnas, Gerald L

APPLICANT: Roberts, Steven F
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70.0%;
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Best Local Similarity 70.0
Matches 7; Conservative
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Best Local Similarity 70.0
Matches 7; Conservative
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US-09-964-201A-29
                                                                                                                                                                                                                                                                                                                                                                                      ; TYPE: PRT
; ORGANISM: GnRH
US-09-305-924-3
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US-09-964-201A-30
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88.0%; Score 44; DB 14; Length 45; 70.0%; Pred. No. 1.2; ive 0; Mismatches 3; Indels

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SOFTWARE: Patentin version 3.1
                                                                                                                           Query Match
Best Local Similarity 70.0
Matches 7; Conservative
                                                                                                                                                                                                       1 EHWSXGXXPG 10
                                                                       ; ORGANISM: Human
US-10-076-674-9
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                SEQ ID NO 9
LENGTH: 45
TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 8, Application US/10076674
Fublication No. US20030165478A1
GENERAL INFORMATION:
APPLICANT: SOKOll, Kenneth K.
TITLE REPERENCE: Immunogen Delivery System
CURRENT APPLICANTON: Stabilized Synthetic Immunogen Delivery System
CURRENT APPLICATION NUMBER: US/10/076,674
CURRENT FILING DATE: 2002-04-23
NUMBER OF SEQ ID NOS: 11
SEQ ID NO 8
IBRGTH: 45
                                                                                                                                          Sequence 7, Application US/10355161A
Publication No. US20040009897A1
GENERAL INFORMATION:
APPLICANT: Sokoll, Kenneth K.
TITLE OF INVENTION: Stabilized Synthetic Immunogen Delivery System
FILE REFERENCE: Immunogen Delivery System
CURRENT FILING DATE: 2003-01-31
PRIOR APPLICATION NUMBER: US/10/355,161A
PRIOR FILING DATE: 2003-01-31
PRIOR FILING DATE: 2003-01-43
NUMBER OF SEQ ID NOS: 10 NOS: 10
NUMBER OF SEQ ID NOS: 10
SOFTWARE: Patentin version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 9, Application US/10076674
Publication No. US20030165478A1
GENERAL INFORMATION:
APPLICANT: Sokoll, Kenneth K.
TITLE OF INVENTION: Stabilized Synthetic Immunogen Delivery System; CURRENT APPLICATION NUMBER: US/10/076,674
CURRENT FILING DATE: 2002-04-23
NUMBER OF SEQ ID NOS: 11
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Pred. No. 0.76;
0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     88.0%;
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Best Local Similarity 70.00
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Best Local Similarity 70.0
Matches 7; Conservative
                  1 EHWSXGXXPG 10
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                                                    18 EHWSYGLRPG 27
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                                                                                                         RESULT 15
US-10-355-161A-7
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US-10-076-674-8
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US-10-076-674-9
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LENGTH: 27
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                                                                                                        Sequence 8, Application US/10355161A

Publication No. US20040003897A1

GENERAL INFORMATION:

APPLICANT: Sokoll, Kenneth K.

TITLE OF INVENTION: Stabilized Synthetic Immunogen Delivery System

FILE REFERENCE: Immunogen Delivery System

CURRENT APPLICATION NUMBER: US/10/355,161A

CURRENT FILING DATE: 2003-01-31

PRIOR PILING DATE: 2002-02-14

NUMBER OF SEQ ID NOS: 13

SEQ ID NOS: 13

SEQ ID NOS: 13

SEQ ID NOS: 13

SEQ ID NOS: 13
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Publication No. US20040008897A1

GENERAL INFORMATION

TITLE OF INVENTION: Stabilized Synthetic Immunogen Delivery System

TITLE OF INVENTION: Stabilized Synthetic Immunogen Delivery System

CURRENT ELING DATE: 2003-01-31

PRIOR PILIGATION NUMBER: US/10/355,161A

PRIOR FILING DATE: 2002-02-14

NUMBER OF SEQ ID NOS: 13

SEQ ID NOS: 13

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SEQ ID NOS: 13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    88.0%; Score 44; DB 15; Length 45; 70.0%; Pred. No. 1.2; tive 0; Mismatches 3; Indels
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Best Local Similarity 70.0%;
Matches 7; Conservative
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Best Local Similarity 70.0
Matches 7; Conservative
36 EHWSYGLRPG 45
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Gaps

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APPLICANT: Barney, S.
APPLICANT: Barney, S.
APPLICANT: Guthrie, K.
APPLICANT: Guthrie, K.
APPLICANT: Meritka, G.
APPLICANT: Meritka, G.
APPLICANT: Ambert, D.
APPLICANT: Lambert, D.
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED PHARMACOKINETIC
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED PHARMACOKINETIC
CURRENT PILING DATE: 1090-01-24
PRIOR PRILING DATE: 1090-01-24
PRIOR PRILING DATE: 1999-05-00
PRIOR APPLICATION NUMBER: 09/315,304
PRIOR FILING DATE: 1999-05-00
PRIOR FILING DATE: 1999-05-20
PRIOR FILING DATE: 1999-05-20
PRIOR FILING DATE: 1999-05-20
PRIOR FILING DATE: 1999-05-20
SOFTWARE: FastSEQ for Windows Version 3.0
SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 9, Application US/09305924A

Publication No. US20030091579A1

GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Stephen D. Acres
APPLICANT: Stephen D. Acres
APPLICANT: Richard Harland
TITLE REFERENCE: 9001-0048
CURRENT PILIGE DATE: 1999-05-05
GENERAL APPLICATION NUMBER: US/09/305,924A
CURRENT FILING DATE: 1999-05-05
SABLIER RILING DATE: 1998-05-05
SABLIER PILING DATE: 1998-05-05
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 9
SEQ ID NO:
LENGTH: 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 41; DB 10; Length 10;
Pred. No. 1;
                                                                                                                    Score 41; DB 10; Length 10;
Pred. No. 1;
1; Mismatches 3; Indels
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ORGANISM: Artificial Sequence
                                                                                                                             82.0%;
60.0%;
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Best Local Similarity 60.0
Matches 6; Conservative
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Best Local Similarity 60.0
Matches 6; Conservative
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                                       : Porcine
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; ORGANISM: GnRH
US-09-305-924-9
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                                    ; ORGANISM: Porc
US-09-964-201A-32
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US-09-305-924-9
; TYPE: PRT
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US-09-964-201A-32
US-09-964-201A-32
Sequence 32, Application US/09964201A
Fublication No. US20030091575A1
GENERAL INFORMATION:
APPLICANT: Tramontano, Alfonso
APPLICANT: Tramontano, Alfonso
APPLICANT: Dohnas, Gerald L
APPLICANT: Dohnas, Garald L
APPLICANT: APPLICANT: Steven F
TITLE OF INVENTION: HAAT-SHOCK FUSION-BASED VACCINE SYSTEM
FILE REFRENDE: US. Patent Application No. US20030091575A1 09\026,276
CURRENT APPLICATION NUMBER: US/09/964,201A
CURRENT PILING DATE: 2002-05-21
NUMBER OF SEQ ID NOS: 35
SOFTWARE: Patent In Ver. 2.0
; SEQ ID NO 32
LENGTH: 10
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Pred. No. 1;
1; Mismatches 3; Indels
                                                                                            Sequence 2, Application US/09019010

Patent No. US20010014330A1

GENERAL INPORMATION:
APPLICANT: HARLAND:
APPLICANT: ACRES, STEPHEN D.
TITLE OF INVENTION: INMUNIZATION AGAINST ENDOGENOUS
TITLE OF INVENTION: MCLECULES
NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS: ADDRESSE: AD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/019,010
FILING DATE: 05-FEB-1998
CLASSIFICATION NUMBER: US 60/036,883
FILING DATE: 05-FEB-1997
ATTORNEY/AGENT INFORMATION:
NAME: MCCRACKEN, THOMAS P.
REGISTRATION NUMBER: 38,548
REGISTRATION NUMBER: 38,548
REGISTRATION NUMBER: 9001-0035
TELEPHONE: (650) 325-7812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             82.0%;
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INFORMATION FOR SEQ ID NO: 2
SEQUENCE CHARACTERISTICS:
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amino acid
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Best Local Similarity 60.0
Matches 6; Conservative
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                                              RESULT 20
US-09-019-010-2
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SOFTWARE: FastSEQ for Windows Version 3.0 SEQ ID NO 1344
LENGTH: 10
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COTHER INFORMATION: Core polypeptide
US-10-351-641-1344
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OTHER INFORMATION: LHRH1 analogue
US-10-360-101-299
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ORGANISM: Artificial Sequence
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ORGANISM: Artificial Sequence
                                                                   TYPE: PRT
ORGANISM: Artificial Sequence
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Best Local Similarity
Matches 6; Conserva
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Matches 6; Conserv
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Sequence 1344, Application US/2030186874A1

Sequence 1344, Application US/2030186874A1

GENERAL INFORMATION:
APPLICANT: Barney, S.
APPLICANT: Marutka, G.
APPLICANT: Marutka, G.
APPLICANT: Lamber, M.
APPLICANT: NOWER: US/10/351,641

TITLE OF INVENTION: PROPERTIES
FILE REFERENCE: 7372-100

CURRENT APPLICATION NUMBER: US/10/351,641

CURRENT FILING DATE: 1999-07-09

PRIOR FILING DATE: 1999-07-09

PRIOR FILING DATE: 1999-07-09

PRIOR FILING DATE: 1998-05-20

PRIOR FILING DATE: 1998-05-20

FRIOR FILING DATE: 1998-05-20

NUMBER OF SEQ ID NOS: 1757
                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: ATMET. D.
APPLICANT: ATMET. D.
APPLICANT: Lambert, D.
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED PHARMACOKINETIC
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED PHARMACOKINETIC
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED PHARMACOKINETIC
TITLE OF INVENTION: HYBRID OF TOUR TOUR PAPPLICATION NUMBER: 09/350,641
PRIOR PILING DATE: 1999-07-09
PRIOR PLILING DATE: 1999-07-09
PRIOR PLILING DATE: 1999-05-20
PRIOR PLILING DATE: 1999-05-20
PRIOR FILING DATE: 1998-05-20
NUMBER OF SEQ ID NOS: 1757
SOFTWARE: PSECSEC FOR Windows Version 3.0
SEQ ID NO 1309
LENGTH: 10
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                                                 82.0%; Score 41; DB 14; Length 10; 60.0%; Pred. No. 1; ive 1; Mismatches 3; Indels
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Sequence 1309, Application US/10351641
; Publication No. US20030186874A1
; GENERAL INFORMATION:
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// OTHER INFORMATION: Core polypeptide
US-10-351-641-1309
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ORGANISM: Artificial Sequence
                                   Query Match
Best Local Similarity 60.0.
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Best Local Similarity 60.0
Matches 6; Conservative
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Merutka, G.
                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Barney,
APPLICANT: Guthri
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US-10-351-641-1344
              US-10-351-641-1143
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Sequence 299, Application US/10360101
Sequence 299, Application US/10360101
Sequence 299, Application US/10360101
Sequence 299, Application No. US20040009550A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Moll, Gert N.
APPLICANT: Leehouts, Cornelis J.
TITLE OF INVENTION: Export and modification of (poly) peptide in the lantibiotic way FILE REFERENCE: 2183-5673
FILE REFERENCE: 2183-5673
FILE REFERENCE: 2003-02-07
FILE REPERENCE: 2003-02-02-07
FILE REPERENCE: 2003-02-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 26
US-10-360-101-1
Squance 1, Application US/10360101
Publication No. US20040009550A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Moll, Gert N.
TITLE OF INVENTION: Export and modification of (poly) peptide in the lantibiotic way
TITLE OF INVENTION: Export and modification of (poly) peptide in the lantibiotic way
TITLE OF INVENTION: 2003-02-07
CURRENT APPLICATION NUMBER: US/10/360,101
CURRENT FILING DATE: 2003-02-07
PRIOR FILING DATE: 2002-05-24
NUMBER OF SEQ ID NOS: 309
SOCTIVARE: PatentIn version 3.1
SEQ ID NO 1
LENTH: 10
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                                                                                                                             Gaps
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82.0%; Score 41; DB 14; Length 10; 60.0%; Pred. No. 1;
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                                                                                                                             3; Indels
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                                                                                                                                   1; Mismatches
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APPLICANT: Barney, S.
APPLICANT: Barney, S.
APPLICANT: Guthrie, K.
APPLICANT: Meruka, G.
APPLICANT: Meruka, G.
APPLICANT: Amber, M.
APPLICANT: Amber, M.
APPLICANT: Lamber, D.
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED PHARMACOKINETIC
TITLE OF INVENTION: HYBRE: US/10/351,641
CURRENT FILING DATE: 1003-01-24
PRIOR APPLICATION NUMBER: 09/350,641
PRIOR PELING DATE: 1999-05-20
PRIOR FILING DATE: 1999-05-20
PRIOR FILING DATE: 1999-05-20
NUMBER OF SEQ ID NOS: 1757
SOFTHARE: PASICED FOR Windows Version 3.0
SEQ ID NO 1146
LENGTH: 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTHER INFORMATION: Description of Artificial Sequence: Synthetic CTHER INFORMATION: Peptides US-10-044-034-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 41; DB 13; Length 11;
Pred. No. 1.1;
1; Mismatches 3; Indels
                                                                                                                                                                                      PUBLICATION NO. US2002016524A1
| GENERAL INFORMATION:
| APPLICANT: JACKSON, DAVID C. |
| APPLICANT: G'ERIEN-SIMPSON, NEIL M. APPLICANT: BROWN, LORENA E. |
| APPLICANT: BROWN, LORENA E. |
| APPLICANT: BROWN, LORENA E. |
| APPLICANT: BRANDT, EVELYN R. |
| APPLICANT: BRANDT, EVELYN R. |
| APPLICANT: GOOD, MICHAEL F. |
| APPLICANT: GOOD, MICHAEL F. |
| TILLE OF INVENTION: POLYMERS INCORPORTING PEPTIDES FILE REPERENCE: FRRC:006 |
| CURRENT APPLICATION NUMBER: US/10/044,034 |
| PRIOR FILING DATE: 1997-02-11 |
| PRIOR FILING DATE: 1997-02-11 |
| SEQ ID NO S: 28 |
| SOFTWARE: PATENTIN VET. 2.1 |
| LEMORTH: LING FAIL OF THE COMMENT IN THE CANADA I
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US-10-351-641-1146
US-10-351-641-1146

Sequence 1146, Application US/10351641

Publication No. US20030186874A1

GENERAL INFORMATION:
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                                                                                                                                                         Sequence 17, Application US/10044034
Publication No. US20020169264A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: PRT
ORGANISM: Artificial Sequence
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ORGANISM: Artificial Sequence
FBATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 60.0%;
Matches 6; Conservative
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1 QHWSYGLRPG 10
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                                                                                                                                                                                                                                                                              RESULT 28
US-10-617-561-9
; Sequence 9, Application US/10617561
; Publication No. US20040018967A1
; GENERAL INFORMATION:
; APPLICANT La. State Univ. & Mech. Coll., Board of Supervisors
; APPLICANT La. State Univ. & Mech. Coll., Board of Supervisors
; APPLICANT La. State Univ. & Mech. Coll., Board of Supervisors
; APPLICANT La. State Univ. & Mech. Coll., Board of Supervisors
; GENERAL INFORMATION: Samuel M. Hansel, Wen H. Melrose, Patricia A. Foll, Lane D. Elear, Philip H.
; FOll, Lane D. Elear, Philip H.
; TITLE OF INVENTION: Ligand/Lytic Peptide Compositions and Lords. 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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OTHER INFORMATION: /note= "This sequence is a modified
GRRH."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .
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COUNTY: USA
COUNTY: USA
CONDUCTER READBLE FORM:
MIDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PSTENTIN Release #1.0, Version #1.25
CURSING DATE: 11-741-2003
FILING DATE: 11-741-2003
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
APPLICATION OF CLASSIFCATION STRING PARE: 11-741-2003
FILING DATE: 11-741-2003
FILING DATE: 15-741-1999
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 41; DB 15; Length 10;
Pred. No. 1;
1; Mismatches 3; Indels
82.0%; Score 41; DB 15; Length 10; 60.0%; Pred. No. 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: Runnels, John H.
REGIGTRATION NUMBER: 33,451
REFERENCE/DOCKET NUMBER: 96A3.2-US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (225) 387-3221
TELEPRAT (225) 346-8049
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
                                                                     1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; SEQUENCE DESCRIPTION: SEQ ID NO: US-10-617-561-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 18
CORRESPONDENCE ADDRESS:
ADDRESSE: JOHN H. Runnels
STREET: P. O. BOX 2471
CITY: Baton Rouge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 10 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               82.0%;
60.0%;
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MOLECULE TYPE: peptide
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 60.0
Matches 6; Conservative
                                    Best Local Similarity 60.0
Matches 6, Conservative
                                                                                                                                          1 EHWSXGXXPG 10
                                                                                                                                                                                                        1 OHWSYGLRPG 10
       Query Match
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Gaps

Length 18;

Score 41; DB 14; Pred. No. 1.7;

82.0%;

Query Match Best Local Similarity

1 EHWSXGXXPG 10

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FEATURE:
COTHER INFORMATION: Core polypeptide
US-10-351-641-1148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; TYPE: PRT
; ORGANISM: Artificial Sequence.
; PEATURE:
; OTHER INFORMATION: Core polypeptide
US-10-351-641-1172
ORGANISM: Artificial Sequence
                                                                         82.0%;
illarity 60.0%;
Conservative
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Best Local Similarity 60.0%;
Matches 6; Conservative
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                                                                                                                                     1 EHWSXGXXPG 10
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                                                                          Query Match
Best Local Similarity
Matches 6; Conserve
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US-10-351-641-1148
US-10-351-641-1148
is Sequence 1146, Application US/10351641
is Publication No. US20030186874A1
is GENERAL INFORMATION:
is APPLICANT: Barney, S.
is APPLICANT: Guthrie, K.
APPLICANT: Anwer, M.
ITILE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED PHARMACOKINETIC
ITILE OF INVENTION: HYBRID 1093-01-24
PRIOR APPLICATION NUMBER: 09/350,641
PRIOR FILING DATE: 1999-07-09
PRIOR FILING DATE: 1999-07-09
PRIOR FILING DATE: 1999-07-09
PRIOR FILING DATE: 1999-05-20
NUMBER OF SEQ ID NOS: 1757
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 1148
LENGTH: 18
                                                                                                                               Gaps
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 3; Indels
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60.0%; Pred. No. 1.7;
tive 1; Mismatches 3
   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; OTHER INFORMATION: Core polypeptide US-10-351-641-1147
   1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 60.0
Matches 6; Conservative
   6; Conservative
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                                1 EHWSXGXXPG 10
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5 QHWSYGLRPG 14
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   Matches
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US-10-351-641-1172

Sequence 1172. Application US/10351641

Publication No. US20030186874A1

GENERAL INFORMATION:
APPLICANT: Barney, S.
APPLICANT: Anwer, M.
APPLICANT: Lambert, D.
TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED PHARMACOKINETIC

TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED PHARMACOKINETIC

TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED PHARMACOKINETIC

TITLE OF INVENTION: HYBRE US/10/351,641

TITLE OF INVENTION: PROPERTIES
FILE REPREBRENCE: 787-100

CURRENT APPLICATION NUMBER: US/10/351,641

PRIOR FILING DATE: 1999-07-09

PRIOR PELING DATE: 1999-07-09

PRIOR PELING DATE: 1999-07-09

PRIOR PELING DATE: 1999-05-20

PRIOR PELING DATE: 1999-05-20

PRIOR PELING DATE: 1998-05-20

NUMBER OF SEQ ID NOS: 1757

SOFTWARE: FRAGESEQ for Windows Version 3.0

LENGTH: 18
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Length 18;
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                                 Indels
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Score 41; DB 14;
Pred. No. 1.7;
1; Mismatches 3
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NUMBER OF SEQ ID NOS: 1757
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 1145
LENGTH: 22
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION: Core polypeptide US-10-351-641-1144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Koonce, Kenneth L.
McCann, Samuel M.
Yu, Wen H.
Melrose, Patricia A
                                                                                                                                                                                                                   FEATURE:
, OTHER INFORMATION: Core polypeptide US-10-351-641-1145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT ORGANISM: Artificial Sequence
                                                                                                                                                  TYPE: PRT ORGANISM: Artificial Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 60.0
Matches 6, Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 37
US-10-351-641-1144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
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US-09-964-201A-26

Sequence 26, Application US/09964201A

Publication No. US2030091575A1

GENERAL INCPMATION:
APPLICANT: Kenten, John H

APPLICANT: Pilon, Aprile L

APPLICANT: Pilon, Aprile L

APPLICANT: Lohnas, Gerald L

APPLICANT: Pilon, Aprile L

APPLICANT: Pilon, Aprile L

APPLICANT: Pilon, Aprile L

APPLICANT: Pohas, Gerald L

APPLICANT: Po
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      publication US/10351641

publication No. US2030186674A1

general INFORMATION:

GENERAL INFORMATION:

APPLICANT: Barrey, S.

APPLICANT: BARREY, M.

APPLICANT: ANWER, G.

ITILE OF INVENTION: HYBRID POLYPEPTIDES WITH ENHANCED PHARMACOKINETIC

TILLE OF INVENTION: PROPERTIES

FILE REFERENCE: 7872-100

CURRENT APPLICATION NUMBER: US/10/351,641

CURRENT APPLICATION NUMBER: 09/350,641

PRIOR APPLICATION NUMBER: 09/350,641

PRIOR FILING DATE: 1999-07-09

PRIOR FILING DATE: 1999-05-20

PRIOR APPLICATION NUMBER: 09/315,304

PRIOR FILING DATE: 1999-05-20

PRIOR FILING DATE: 1999-05-20

PRIOR FILING DATE: 1999-05-20
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Pred. No. 1.9;
1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                        Score 41; DB 14; Length 18;
Pred. No. 1.7;
1; Mismatches 3; Indels
          PRIOR APPLICATION NUMBER: 09/082,279
PRIOR FILING DATE: 1998-05-20
NUMBER OF SEQ ID NOS: 1757
SOFTWARE: PastSEQ for Windows Version 3.0
SEQ ID NO 1173
LENGTH: 18
                                                                                                                                                                                                                                                                                              FEATURE:

CTHER INFORMATION: Core polypeptide

US_10-351-641-1173
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60.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                               82.0%;
                                                                                                                                                                                                                                                              ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 60.0
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 60.0
Matches 6; Conservative
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/ ORGANISM: Porcine
US-09-964-201A-26
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| Publication No. US2030186874A1
| GENERAL INFORMATION:
| APPLICANT: Barney, S. APPLICANT: Guthrie, K. APPLICANT: Anwer, M. APPLICANT: PROPERTIES
| TITLE OF INVENTION: PROPERTIES
| TILLE OF INVENTION: PROPERTIES
| PRIOR APPLICATION NUMBER: 09/350,641
| PRIOR FILLING DATE: 1999-07-09
| PRIOR FILLING DATE: 1999-07-09
| PRIOR FILLING DATE: 1999-05-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
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(WS-10-61-3)
(Sequence 3, Application US/10617561
(Sequence 3) Application US/10617561
(Sequence 3) Application No. US20040018967A1
(GENERAL INFORMATION:
APPLICANT: La. State Univ. & Mech. Coll., Board of Supervisors
(Maynes, Jesse M.
Hansel, William
Hansel, William
(Sequence 2) Application Hansel, William
(Sequence 2) Application Hansel, William
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Query Match

82.0%; Score 41; DB 14; Length 22;
Best Local Similarity 60.0%; Pred. No. 2.1;
Matches 6; Conservative 1; Mismatches 3; Indels
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60.0%; Pred. No. 2.4;
tive 1; Mismatches 3;
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APPLICANT: Kenten, John H
APPLICANT: Kenten, John H
APPLICANT: Tramontano, Alfonso
APPLICANT: Tramontano, Alfonso
APPLICANT: Indones, Gerald L
APPLICANT: Lohnas, Gerald L
APPLICANT: Lohnas, Gerald L
APPLICANT: Noberts, Steven F WISION-BASED VACCINE SYSTEM
FILE REFERENCE: U.S. Patent Application No. US20030091575A1 09\026,276
CURRENT APPLICATION NUMBER: U$/09/964,201A
NUMBER OF SEQ ID NOS: 35
SOFTWARE: Patentin Ver. 2.0
SEQ ID NOS: 35
SOFTWARE: Patentin Ver. 2.0
                                                                                                                       COMPUTER READABLE FULL

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/617,561
PILING DATE: 11-Jul-2003

"LASSIFICATION NUMBER: US/09/381,879
PILING DATE: 25-AM9-199
APPLICATION NUMBER: US/09/381,879
PILING DATE: 25-AM9-199
APPLICATION NUMBER: S.95-AM9-199
APPLICATION NUMBER: 33-451
REPERENCE/DOCKET NUMBER: 96A3.2-US
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 33 amino acide
LENGTH: 33 amino acide
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60.0%; Pred. No. 3;
tive 1; Mismatches 3; Indels
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OTHER INFORMATION: /note= "This sequence is sequence is sequence is sequence for the sequence is sequence for the sequence is sequence description: SEQ ID NO: 4:
US-10-617-561-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 35, Application US/09964201A, Publication No. US20030091575A1 GENERAL INFORMATION:
                                                                                                           ZIP: 70821-2471
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
     STREET: P. O. Box 2471
CITY: Baton Rouge
STATE: LA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               82.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: peptide FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 60.0
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 EHWSXGXXPG 10
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                                                                                             COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 40
TYPE: PRT
CRGANISM: Porcine
US-09-964-201A-35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -09-964-201A-35
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Publication No. US20040018967A1
GENERAL INFORMATION:
APPLICANT: La. State Univ. & Mech. Coll., Board of Supervisors
Baright, Frederick M.
Jaynes, Jesse M.
Hansel, William
Koonce, Kenneth L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note= "This sequence is a modified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
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Elzer, Philip H.
TITLE OF INVENTION: Ligand/Lytic Peptide Compositions and Methods of Use
Elzer, Philip H.
TITLE OF INVENTION: Ligand/Lytic Peptide Compositions and
Methods of Use
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 15; Length 33;
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                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTES SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/617,561
FILING DATE: 11-Jul-2003
CLASSIFICATION SATA:
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: US/09/381,879
FILING DATE: 25-Aug-1999
ATTORNEY AGENT INFORMATION:
NAME: RUDIES: John H.
REGISTATION NUMBER: 33,451
REGISTATION NUMBER: 96A3.2-US
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | COCATION: L.33 | OTHER INFORMATION: / note= "Th: GRAH/hecate fusion peptide." | SEQUENCE DESCRIPTION: SEQ ID NO: 3: US-10-617-561-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 41;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES: 18
CORRESPONDENCE ADDRESS:
ADDRESSEE: John H. Runnels
                                                                                          NUMBER OF SEQUENCES: 18
CORRESPONDENCE ADDRESS:
ADDRESSEE: John H. Runnels
STREET: P. O. Box 2471
CITY: Baton Rouge
STATE: LA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     McCann, Samuel M.
Yu, Wen H.
Melrose, Patricia A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 33 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              82.0%;
60.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 60.0
Matches 6; Conservative
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                                                                                                                                                                                                                                                               USA
                                                                                                                                                                                                                                                               COUNTRY:
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Score 41; DB 10; Length 49; Pred. No. 4.2;
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                                                                                                                                                                                                 3; Indels
                                                                                                                                                         Score 41; DB 9;
Pred. No. 4.2;
1; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                82.0%;
                                                                                                                                                           82.0%;
60.0%;
                                                                                                                                          Query Match
Best Local Similarity 60.0.
Best Local 6, Conservative
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Best Local Similarity 60.0
Matches 6; Conservative
                                          : 49 amino acids amino acid
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Best Local Similarity 60.0
Matches 6; Conservative
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                            TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-019-010-4
                                                                                                                                                                                                                                         1 EHWSXGXXPG 10
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1 QHWSYGLRPG 10
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CRGANISM: GnRH
US-09-305-924-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: GnRH
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                                                                                                                                                                                                   APPLICANT: Kenten, John H
APPLICANT: Framontano, Alfonso
APPLICANT: Tramontano, Alfonso
APPLICANT: Tramontano, Alfonso
APPLICANT: Dohnas, Gerile L
APPLICANT: Lohnas, Geryen F
TITLE OF INVENTION: HEAT-SHOCK FUSION-BASED VACCINE SYSTEM
FILE REPERENCE: U.S. Patent Application No. US20030091575A1 09\026,276
CURRENT APPLICATION NUMBER: US\09\964,201A
NUMBER OF SEQ ID NOS: 35
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 4, Application US/09019010;
Patent No. US20010014330A1
GENERAL INFORMATION:
APPLICANT: HARLAND, RICHARD
APPLICANT: ACRES, STEPHEN D.
TITLE OF INVENTION: INMUNIZATION AGAINST ENDOGENOUS;
TITLE OF INVENTION: MOLECULES
NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
ADDRESSEE: ROBINS & ASSOCIATES
STREET: 90 MIDDLEFIELD ROAD, SUITE 200
CITY: MENLO PARK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION UMBER: US/09/019,010
FILING DATE: 05-FEB-1998
CLASSIFICATION: 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1; Mismatches
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: 06/036,883
FILING DATE: 05-FEB-1997
ATTORNEY/AGENT INFORMATION:
NAME: MCCRACKEN, THOMAS.P.
REFERENCE/DOCKET NUMBER: 38,548
REFERENCE/DOCKET NUMBER: 9001-0035
TELECHONE: (650) 325-7812
TELEPHONE: (650) 325-7823
                                                                                                                                            Sequence 34, Application US/09964201A Publication No. US20030091575A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 82.0
Best Local Similarity 60.0
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 EHWSXGXXPG 10
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                               OHWSYGLRPG 10
          EHWSXGXXPG 10
                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
ORGANISM: Porcine
                                                                                                                         US-09-964-201A-34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-964-201A-34
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US-09-019-010-4
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Sequence 11, Application US/09365924A

Publication No. US20030091579A1

SEQUENCE 11, Application US/09365924A

Publication No. US20030091579A1

GENERAL INFORMATION:
APPLICANT: Stephen D. Acres
APPLICANT: Stephen D. Acres
APPLICANT: Richard Harland
ITILE REFERENCE: 9001-0048

CURRENT PILING DATE: 1999-05-05

GRALIER APPLICATION NUMBER: US 60/084,217

EARLIER PILING DATE: 1998-05-05

NUMBER OF SEQ ID NOS: 14

SOFTWARE: Patentin Ver. 2.0

SEQ ID NO 11

LENGTH: 49
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Gaps
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APPLICANT: Stephen D. Acres
APPLICANT: Stephen D. Acres
APPLICANT: Stephen D. Acres
APPLICANT: Stephen D. Acres
TITLE OF INVENTION: METHODS OF RAISING ANIMALS FOR MEAT PRODUCTION
FILE REPERENCE: 9001-0048
CURRENT APPLICATION NUMBER: US/09/305,924A
CURRENT FILING DATE: 1999-05-05
EARLIER APPLICATION NUMBER: US 60/084,217
EARLIER FILING DATE: 1998-05-05
NUMBER OF SEQ ID NOS: 14
SOFTWARE: PATENT OF ACRES
SEQ ID NO 13
LENĞTH: 695
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APPLICANT: Moll, Gert N.
APPLICANT: Leenhouts, Cornelis J.
TITLE OF INVENTION: Export and modification of (poly) peptide in the lantibiotic way
PILE REFERENCE: 2183-5673
CURRENT APPLICATION NUMBER: US/10/360,101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-360-101-136

US-10-360-101-136

US-10-360-101-136

Sequence 136, Application US/10360101

Sequence 136, Application No. US20040009550A1

SET OF The Part No. US20040009550A1

APPLICANT: Mol, Gerr N.

APPLICANT: Leenhouts, Cornelis J.

TITLE OF INVENTION: Export and modification of (poly)peptide in the lantibiotic way
FILE REFERENCE: 2183-5673

CURRENT APPLICATION NUMBER: US/10/360,101

CURRENT FILING DATE: 2003-02-07

PRIOR APPLICATION NUMBER: BP 02077060.8

PRIOR PLING DATE: 2003-055-24

NUMBER OF SEQ ID NOS: 309

SOFTWARE: Patentin version 3.1

SEQ ID NO 136

LENGTH: 10
       Publication No. US20040009550Al

GENERAL INFORMATION:
APPLICANT: Woll, Gert N.
TITLE OF INVENTION: Export and modification of (poly)peptide in the lantibiotic way
PILE REPRENENT: Leechouts, Cornelis J.
TITLE OF INVENTION: Export and modification of (poly)peptide in the lantibiotic way
FILE REPRENENT: Leechouts, Cornelis J.
URRENT APPLICATION NUMBER: US/10/360,101
CURRENT PILING DATE: 2003-02-07
FRIOR FILING DATE: 2003-05-24
NUMBER OF SEQ ID NOS: 309
SOFTWARE: Patentin version 3.1
SEQ ID NO 126
LENGTH: 10
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1.5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     80.0%; Score 40; DB 15;
60.0%; Pred. No. 1.5;
tive 1; Mismatches 3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                               ; OTHER INFORMATION: (Q1,C7)-sequence of LHRH1
US-10-360-101-126
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Pred. No.
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Sequence 126, Application US/10360101
                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
ORGANISM: Artificial Sequence
PEATURE:
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ORGANISM: Artificial Sequence
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Best Local Similarity 60.0%;
Matches 6; Conservative
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Matche's 6, Conserv
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APPLICANT: Bay, Partha
APPLICANT: Bay, Partha
APPLICANT: Bay, Partha
APPLICANT: Bay, Partha
APPLICANT: Bratacharya, Samir
APPLICANT: Bratacharya, Samir
APPLICANT: Bratacharya, Samir
APPLICANT: Bratacharya, Samir
APPLICANT: Pasha, Santosh
TITLE OF INVENTION: SAME
FILE REFERENCE: U 013858-6
CURRENT APPLICATION NUMBER: US/10/354,433
CURRENT APPLICATION NUMBER: 60/353,041
PRIOR APPLICATION NUMBER: 60/353,041
NUMBER OF SEQ ID NOS: 2
SOFWARE: Patentin Version 3.1
SEQ ID NO
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Sequence 2, Application US/10360101
Sequence 2, Application US/10360101
Sequence 2, Application US/2036040009550A1
GENERAL INFORMATION:
APPLICANT: Moll, Gert N.
APPLICANT: Leenhouts, Cornelis J.
TITLE OF INVENTION: Export and modification of (poly)peptide in the lantibiotic way FILE REFERENCE: 2183-5673
CURRENT APPLICATION NUMBER: US/10/360,101
CURRENT FILING DATE: 2003-02-07
REICH APPLICATION NUMBER: BP 02077060.8
PRIOR APPLICATION NUMBER: BP 02077060.8
NUMBER OF SEQ ID NOS: 309
SOFTWARE: PatentIn version 3.1
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Pred. No. 1.5;
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Pred. No. 1.5
1; Mismatches
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                                                                                                                                                         Sequence 2, Application US/10354433; Publication No. US20030236185A1; GENERAL INFORMATION:
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Best Local Similarity 60.0%;
Matches 6; Conservative
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Matches 6; Conservative
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                                 9 QHWSYGLRPG 18
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         EHWSXGXXPG
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LENGTH: 10
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RESULT 50
US-10-304

1 Sequence 304, Application US/10360101

2 Sequence 304, Application US/10360101

3 ENDIGATION NO. US20040009550A1

GENERAL INFORMATION:
APPLICANT: Lethnouts, Cornelis J.
TITLE OF INVENTION: Export and modification of (poly) peptide in the lantibiotic way
TITLE OF INVENTION: Export and modification of (poly) peptide in the lantibiotic way
CURRENT FILING DATE: 2003-02-07

PRIOR FILING DATE: 2003-02-07

PRIOR FILING DATE: 2002-05-24

NUMBER OF SEQ ID NOS: 309

SEQ ID NO 304

LENGTH: 10

LENGTH: 10
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80.0%; Score 40; DB 15; Length 10;
Best Local Similarity 60.0%; Pred. No. 1.5;
Matches 6; Conservative 1; Mismatches 3; Indels
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CURRENT FILING DATE: 2003-02-07
PRIOR APPLICATION NUMBER: EP 02077060.8
PRIOR FILING DATE: 2002-05-24
NUMBER OF SEQ ID NOS: 309
SOFTWARE: Patentin version 3.1
SEQ ID NO 303
LENGTH: 10
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                                                                                                                                                                                                         OTHER INFORMATION: LHRH1 analogue FEATURE:
                                                                                                                                                   TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
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